A Study of the Public Mental Hospitals of the United States 1937–39

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The Canadian Medical Association

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CONTENTS

Tables

A STUDY OF THE PUBLIC MENTAL HOSPITALS OF THE UNITED STATES, 1937–39

I. Historical Note

In the eighteenth century medical leaders in this country quite generally took the position that mental disorders were phases of illness and should be under medical care. The Pennsylvania Hospital, which was the first general hospital in the country, was opened in 1756 with special provision according to the standards of those days for giving care to the mentally ill. The quarters assigned were unattractive and in a basement but probably there was no other discrimination between standards of treatment for these and for other patients. Interestingly, the second hospital organized in the country was entirely for the mentally sick, a public institution opened in Williamsburg, Va., in 1773. Meanwhile the Society of the New York Hospital had been chartered in 1771, and from the beginning had planned to receive mental patients as well as others; its hospital opened in January 1791, and the first mental patient entered in September 1792.

Those who built hospitals in the early part of the nineteenth century showed less interest in keeping patients with mental ailments under the same roof with those suffering from other disorders, and many general hospitals were organized without psychiatric services; indeed the position generally taken by these hospitals was that no person with a mental illness would be accepted for treatment. At the same time the purely psychiatric institutions gradually increased in number, usually in response to the energetic representations of some person or group who were able to convince the whole community of a crying need. The Pennsylvania Hospital and New York Hospital after a time separated their mental patients from the others, building special branches to serve as psychiatric centers. Several interesting publications have set forth this chapter of medical history.

Mental hospital accommodation has increased during these 180 years along with every other type of hospital accommodation. Many good methods of practice have been adopted by the mental hospitals from the general hospitals, and general hospitals have borrowed some ideas from the mental institutions. After a time there developed a marked difference in size between the two types of hospitals; the mental hospitals grew tremendously. This expansion came about because the public insisted not only that acutely ill and disturbed patients should be suitably cared for, but that all those who were

mentally ill should be given the same therapeutic opportunities that were accorded to the most actively disturbed.

In early days the service of an attending physician was considered adequate for giving medical advice and a small lay staff was in active control. Then resident physicians were added. There is little inclination at present to keep the mentally sick under any but medical direction. A very few institutions have a lay head; in these it is expected that the ranking physician will carry all responsibility for treatment. Inadequacies result from that procedure. It is not yet everywhere realized that treatment in a mental hospital goes far beyond drug therapy and nursing, that it includes a large number of other measures. These institutions with their great numbers, their large area, and their variety of activities share some problems with the hotel, some with the boarding school, and some with the agricultural college; but fundamentally they remain places for the treatment of sick persons who require the resources of every department in accomplishing their social readjustment. Medical direction is, therefore, necessary throughout.

II. Origin of Survey

Those who have been responsible for the care and treatment of the mentally sick have so many ambitions, anxieties, hopes, and problems in common that they have been deeply interested in each other's activities and generally most eager to help in every advance—administrative, architectural, clinical, and therapeutic. One is reminded of the period of cathedral building in England when architects took difficult and arduous journeys just to see and praise any new features that had been devised by others.

In 1844 the medical superintendents of thirteen institutions for the mentally sick formed what is now called the American Psychiatric Association. They met annually and made formal presentation of both scientific and administrative problems. At each meeting they visited some institution and wrote a public statement regarding its organization, equipment, and efficiency. The association gradually grew with the extension of the field of psychiatry, and in 1938 it numbered over 2,000 members. It long ago became too large to make yearly surveys, but its officers and members have always been interested in having accurate information about mental hospitals, so that better provision and more effective treatment might be projected on the basis of exact knowledge of existing conditions.

The National Committee for Mental Hygiene, organized in 1909, had at times at its disposal considerable funds for surveying mental hospitals and other institutions where the mentally sick might be under temporary or permanent care. Other organizations often participated formally and sometimes actively in these surveys.

The American Medical Association which, through its Council on Medical Education and Hospitals, maintains a constant survey of general hospitals that offer residencies in several specialties, made a survey of mental hospitals in 1931. With the growing appreciation of mental factors in all public health work, the United States Public Health Service gradually assumed responsibility in this field; a Division of Mental Hygiene was developed, embracing many projects of field work and several institutions.

In 1936 three agencies, the American Psychiatric Association, The National Committee for Mental Hygiene, and the United States Public Health Service, joined forces and projected a continent-wide survey of mental hospitals. The interest and active support of several other organizations were at once enlisted. These were the American Medical Association, the American Board of Psychiatry and Neurology, the American Neurological Association, the Canadian National Committee for Mental Hygiene, and the Canadian Medical Association. A joint Survey Committee was set up and at various points collaboration with the several staffs was developed, especially with the Council on Medical Education and Hospitals of the American Medical Association.

III. Purpose

The purposes of the survey were: (1) To determine the status of the administrative organizations in various political jurisdictions and the functions which they actually perform; (2) to inform interested public officials about the standards prevailing in different States; (3) to evaluate the adequacy or suitability of institutional structures and equipment; (4) to study the adequacy of professional, sub-professional, and technical personnel; (5) to acquaint those working in the hospital field with what is being done in various institutions; (6) to evaluate the educational facilities for the training of resident physicians; (7) to ascertain the measures and facilities for conduct of research; (8) to present to the medical profession a statement of the public facilities and provisions for meeting the needs of the mentally ill.

IV. Method of Survey

Somewhat less than three years was available for the survey and many hospital organizations were eager for this opportunity to compare experiences and plan better practices. It was decided that the traditional policy of the constituent organizations should be followed, that reports were to be compiled for hospitals or boards that wished them, and that any reasonable time should be spent in helping the hospitals to plan progress and present to their administrative and fiscal bodies a case for more adequate support.

Under this plan surveys were made in all sections of the United States and several regions of Canada. Because of official invitations

covering institutions other than mental hospitals, studies were made of several institutions for convulsive disorders and of schools for mental defectives, but such studies are not included in this report. So far as possible a careful personal inspection of the activities of each institution and an ample discussion with medical and other staff members were made and recorded.

Many other sources of information are available and have been drawn upon where it seemed appropriate to the purpose of this report. The United States Bureau of the Census publishes considerable statistical information about mental hospitals. The files of the National Committee for Mental Hygiene contain valuable information accumulated over more than two decades. The American Medical Association has conducted the only extensive survey of these hospitals in many years, and, though the scope of that survey was purposely limited, its records have been helpful. Administrative bodies in numerous States publish reports which have been studied; and many hospitals have furnished new statistical data. A great many persons interested in various ways in the institutions have been interviewed.

An outline plan was followed in order to assure the comparability of information and reports. Personal inspections were concerned particularly with (1) the physical plant, including location, control, finances, general utilities, bed capacity, and food service; (2) special medical facilities, such as laboratories, necropsy facilities, X-ray, surgical provisions, and dental facilities; (3) staff and personnel, including consultant and resident medical staff, dental staff, nursing, technical, social service, and general personnel; (4) medical service, including admission procedure, diagnostic service, general treatment, and special therapeutic procedures such as psychotherapy, occupational therapy, physiotherapy, fever therapy, shock therapy, physical training, and recreation; (5) records, especially clinical and statistical; (6) the practices regarding the management of special groups, such as the tuberculous, the aged, the disturbed; (7) special matters such as research, medical libraries, community activities, and family care.

V. Scope

This report is, therefore, based on widespread observation. It does not include a personal inspection of every institution. Since not all the hospitals could be visited, questionnaires were sent out covering the matters that could best be tabulated. Visits were made to 149 mental hospitals and reports were rendered by these and 33 more. Of the institutions approached, none failed to give information. The hospitals studied were publicly supported institutions accepting the mentally sick for treatment. The report does not include (except in certain matters mentioned later) the private institutions, nor municipal institutions designed only for the reception and brief care of

patients who are to be passed on to other institutions. Data from the Boston Psychopathic Hospital and a few others that function similarly as receiving hospitals, since they are a part of the State hospital system, are included. Data on Canadian institutions are not included.

VI. Classification of Mental Institutions

A current classification of mental hospitals and services is based essentially on the length of time for which a patient is accepted. Formerly the phrase "psychopathic hospital" or "psychopathic service" was the popular term for a unit where patients were received for immediate relief, brief study, temporary treatment, and distribution. Institutions or services accepting patients to remain as long as treatment might be necessary were given a different designation. Nomenclature tends to change, and no one adjective presently defines the limits of care. The tendency is for observational units to extend their period of treatment for selected patients, and for terms of admission to other hospitals to become simpler and less burdensome to the emotions of the patient and his friends. This results in cases being received in earlier stages of illness.

Another classification of more importance is based on the jurisdictions that maintain the institutions.

1. CITY OR COUNTY INSTITUTIONS

In passing, let it be said that a considerable number of municipal hospitals have mental wards for observation, diagnosis, and disposition, but not for prolonged treatment. This report gives more attention to institutions that offer a patient treatment for as long as may be necessary. Very few cities have attempted this type of care. St. Louis has a very large institution and Philadelphia also had one until recently when it was taken over by the State. Pittsburgh maintains its own mental institution as one division of a large hospital combining care for mental patients, home and hospital for the aged and sick, and a tuberculosis sanitarium.

In seven States, Iowa, Michigan, Missouri, New Jersey, Pennsylvania, Tennessee, and Wisconsin, there are county institutions as well as State institutions. It should be noted that Michigan has only one county institution.

Missouri, New Jersey, and Pennsylvania leave to local initiative the decision as to whether mental patients should be cared for in local institutions or turned over to the State. In Iowa and Wisconsin there is a definite theory of distribution of responsibility between State and county institutions. In Wisconsin, for instance, every patient is supposed to have the privilege of a year's residence in the State hospital where many treatment facilities are to be available. This arrangement is expected to be beneficial to recoverable cases and to

bring about the restoration of a large number to their homes. Patients who are not already well enough to go to their homes in the first year and are expected to remain mentally ill are then transferred to a county institution, unless they are too disturbed or suicidal. The State, therefore, has assumed responsibility for the care of all new patients, and of all old patients who cannot live in a simple environment with safety to themselves and to others. In practice this distribution does not work ideally. The patients often go to a county institution long before the first year is up. The State institution sometimes becomes so crowded that residence there is objectionable; inadequate provision is made for the high proportion of disturbed patients that must under the system be treated in the State hospital.

Several of these county institutions are fine hospitals. A considerable number are mediocre. The Wisconsin and Iowa institutions are, for the most part, divisions of the county infirmary or almshouse. They are simple, because the patient population is expected to be fairly homogeneous and tractable. Some institutions in Pennsylvania and New Jersey are fully developed hospitals and indeed of admirable grade. The one county institution in Michigan has certain standards of personnel, care, treatment, and research that may well be envied by many State hospitals.

Standards are not determined by size and there are pronounced deficiencies in some of the largest institutions. Many counties do not feel financially able to make their hospitals what they should be in either equipment or personnel. Under the county care system, which was designed to avoid expense, scandals have arisen because of neglect and abuse of patients. Such scandals led New York to abolish county care in the last decade of the nineteenth century. Legislative approval of State care was recently obtained in Pennsylvania. Wisconsin, in 1938, somewhat dissatisfied with conditions in its county institutions, took steps to exercise rigorous State control over them, and it will be interesting to see whether the weaknesses in the system can thus be corrected. The experience of European countries where closer inspection prevails would lead one to think that such correction is possible.

Most States give some supervision to the county institutions. In Pennsylvania inspections are made at stated times by a physician from a State hospital staff who has been temporarily assigned to this duty by the Bureau of Mental Hygiene. Iowa has a lay inspector whose visits are fairly frequent and whose influence has been thrown to the advantage of the patients. Missouri gives but little attention to its county institutions. Most of them are mere annexes of the almshouse. They are visited at times by a State authority but the board that controls the State hospitals has little concern about the almshouses and is unable to tell how many there are.

2. STATE INSTITUTIONS

Every State maintains one or more mental hospitals. The total number is 180. Some States have never had any other system of care. Other States developed both State and county institutions over a long period, then dropped county care.

The State institutions are the most numerous and important and this report deals mainly with their activities.

Many commonwealths providing State care also provide State maintenance, but there are several variations. Michigan, for instance, requires counties to pay for the patient during the first year of his commitment. Other States, for example Missouri and Pennsylvania, charge part of the cost to the county from which the patient comes.

3. FEDERAL INSTITUTIONS

Until after the World War the Federal Government had little occasion to operate mental hospitals. Its activities were centralized at St. Elizabeths Hospital in Washington, D. C., opened in 1855 to care for the inhabitants of the District of Columbia and for those who become mentally ill in the military, naval, or other designated services. A special institution in South Dakota cared for Indian mental patients from 1898 to 1933. The mentally ill of Alaska are boarded in a private institution in the State of Oregon.

Following the World War the Federal Government took steps to provide hospital facilities for mentally ill veterans. There are now under the Veterans Administration 27 mental hospitals strategically scattered through the country. In addition, 46 of the general facilities of the Veterans Administration give temporary care for some mental patients. Cases in 1938 totaled about 26,000.

The Government also has two hospitals for those coming under treatment because of drug addiction. Another institution cares for defective delinquents.

For practical reasons the St. Elizabeths Hospital at Washington, D. C., will be found listed among the State hospitals in the following tabulations. To be sure, it takes patients from several national services and is maintained more liberally than most State hospitals, but it also serves the District of Columbia as would any State institution. Its liberal personnel ratios are not permitted to influence the figures for its geographic region.

4. INSTITUTIONS SUPPORTED BY FOUNDATIONS

One small group of special institutions deserves particular comment. These are hospitals supported by benevolent foundations. The accident of history placed them on or near the Atlantic seaboard, except for the latest addition. There are but nine of these institu-

tions, two in Pennsylvania and one each in Massachusetts, Vermont, Rhode Island, Connecticut, New York, Maryland, and Wisconsin. Their activities have been of great value not only to the patients treated in them but also to psychiatry generally. All are dependent in large measure on income from private patients, but all have given much treatment to worthy patients at less than cost. Their advantage has been that they could set their own limits as to size, and could obtain funds for any type of treatment that commended itself to the administrator and his board. In this way many experiments have been made with procedures, and principles of action have been worked out so that they could be applied to the needs of other types of mental hospitals. Since medical and nursing staffs and special therapists can be employed in such hospitals in larger numbers than is possible in public hospitals, these institutions have been able to demonstrate the value of various procedures that public hospitals only at a later time could obtain money to adopt. Benevolence has also characterized the hospitals founded by churches in various communities.

5. PRIVATE INSTITUTIONS OPERATED FOR PROFIT

These institutions are more numerous near centers of population. The well-organized States license such institutions and some maintain an inspection system. Some private institutions, as might be expected, maintain very fine standards. They have not been included in the present survey but at appropriate places statistics regarding them will be added to those of the public institutions.

Tables 1 and 2 record for each State the number of hospitals for mental disease under each type of control and the number of patients in these hospitals.

TABLE 1.—*Hospitals for mental diseases by type of control, January 1, 1939*

Region and State	State		City and county		Veterans		Private		Total (number)
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
United States	[1] 182	32.7	122	21.9	27	4.8	226	40.6	[1] 557
New England	22	39.3	.....	.....	2	3.6	32	57.1	56
Maine	2	50.0	.....	.....	.....	.....	2	50.0	4
New Hampshire	1	100.0	.....	.....	.....	.....	.....	.....	1
Vermont	1	33.3	.....	.....	.....	.....	2	66.7	3
Massachusetts	14	50.0	.....	.....	2	7.1	12	42.9	28
Rhode Island	1	33.3	.....	.....	.....	.....	2	66.7	3
Connecticut	3	17.6	.....	.....	.....	.....	14	82.4	17
Middle Atlantic	33	31.1	19	17.9	4	3.8	50	47.2	106
New York	22	42.3	.....	.....	2	3.8	28	53.8	52
New Jersey	3	17.6	6	35.3	1	5.9	7	41.2	17
Pennsylvania	8	21.6	13	35.1	1	2.7	15	40.5	37
East North Central	34	26.8	42	33.1	6	4.7	45	35.4	127
Ohio	8	32.0	1	4.0	1	4.0	15	60.0	25
Indiana	6	60.0	.....	.....	1	10.0	3	30.0	10
Illinois	11	39.3	1	3.4	2	7.1	14	50.0	28
Michigan	6	42.9	2	14.3	1	7.1	5	35.7	14
Wisconsin	3	6.0	38	76.0	1	2.0	8	16.0	50

[1] Includes Medical Center for Federal Prisoners, Springfield, Mo.

TABLE 1.—*Hospitals for mental diseases by type of control, Janaury 1, 1939*—Con.

Region and State	State		City and county		Veterans		Private		Total (number)
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
West North Central	26	25.2	56	54.4	2	1.9	19	18.4	103
Minnesota	7	50.0			1	7.1	6	42.9	14
Iowa	6	9.2	55	84.6	1	1.5	3	4.6	65
Missouri	4	30.8	1	7.7			8	61.5	13
North Dakota	1	100.0							1
South Dakota	1	100.0							1
Nebraska	3	100.0							3
Kansas	4	66.7					2	33.3	6
South Atlantic (excluding District of Columbia)	19	38.8	1	2.0	3	6.1	26	53.1	49
Delaware	1	100.0							1
Maryland	4	26.7	1	6.7	1	6.7	9	60.0	15
Virginia	4	50.0			1	12.5	3	37.5	8
West Virginia	4	100.0							4
North Carolina	3	33.3					6	66.7	9
South Carolina	1	50.0					1	50.0	2
Georgia	1	20.0			1	20.0	3	60.0	5
Florida	1	20.0					4	80.0	5
District of Columbia	1	50.0					1	50.0	2
East South Central	10	38.5	2	7.7	2	7.7	12	46.2	26
Kentucky	3	33.3			1	11.1	5	55.6	9
Tennessee	3	33.3	2	22.2			4	44.4	9
Alabama	2	66.7					1	33.3	3
Mississippi	2	40.0			1	20.0	2	40.0	5
West South Central	13	46.4	1	3.6	2	7.1	12	42.9	28
Arkansas	1	50.0			1	50.0			2
Louisiana	2	40.0	1	20.0			2	40.0	5
Oklahoma	4	66.7					2	33.3	6
Texas	6	40.0			1	6.7	8	53.3	15
Mountain	10	66.7			2	13.3	3	20.0	15
Montana	1	100.0							1
Idaho	2	100.0							2
Wyoming	1	50.0			1	50.0			2
Colorado	2	33.3			1	16.7	3	50.0	6
New Mexico	1	100.0							1
Arizona	1	100.0							1
Utah	1	100.0							1
Nevada	1	100.0							1
Pacific	13	29.5	1	2.3	4	9.1	26	59.1	44
Washington	3	42.9			1	14.3	3	42.9	7
Oregon	2	50.0			1	25.0	1	25.0	4
California	8	24.2	1	3.0	2	6.1	22	66.7	33

Only one-third of all mental hospitals in the United States are under State control, but they care for 83 percent of all patients. In some States considerable care is given in county and city hospitals. A veteran can be hospitalized either at a Veterans Administration Facility or in a State hospital. Hospitals under these three types of control constitute 60 percent of all mental hospitals. They give treatment to 97 percent of institutionalized mental patients.

It should be noted that while Veterans Administration Facilities are recorded in table 1 in the State in which they are located, table 2 indicates the State of residence of the veteran prior to hospitalization.

The number of private hospitals varies considerably among the States. Fourteen States were recorded as having no mental hospitals under private control. State boundaries do not constitute barriers for private as for State hospital patients. It has not been possible

to allocate private patients to State of residence before hospitalization, but the proportion of such patients is in each case so small that the total figures would not be greatly altered. In those few States where the proportion of private patients is considerably larger than the average for the country, the presence of one or more well-developed private hospitals is indicated. The extraordinarily high proportion in Vermont is due to the large number of State-supported patients treated in the Brattleboro Retreat, a private institution.

The fact that many States do not require registration of private hospitals makes it difficult to obtain an all-inclusive institutional list. The Bureau of the Census is at present engaged in the compilation of a complete list of institutions based on all existing lists, with the addition of those institutions in which deaths of persons with mental disease are reported to have occurred, although the institution had never previously been reported as caring for mental patients.

The data from which these tabulations were compiled were gleaned principally from the hospital information blanks of the American Medical Association for the year 1938, and from supplementary questionnaires that the American Medical Association circulated for the Mental Hospital Survey Committee among State hospitals for mental disease and State institutions for mental defect and epilepsy. It was necessary in many instances to supplement this information with occasional items from other sources. They were as follows: The Hospital Number of the Journal of the American Medical Association, March 11, 1939; the published annual reports of the hospitals; the data collected at the time of survey of these hospitals by the Mental Hospital Survey Committee; and published information of the Bureau of the Census and the Veterans Administration.

TABLE 2.—*Census of patients in hospitals for mental disease by type of control, January 1, 1939*

Region and State	State		City and county		Veterans		Private		Total (number)
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
United States	[1] 382,964	82.7	41,185	8.9	26,083	5.6	12,799	2.8	[1] 463,031
New England	38,156	90.2			1,972	4.7	2,178	5.1	42,306
Maine	2,681	94.4			134	4.7	25	.9	2,840
New Hampshire	2,211	95.5			103	4.5			2,314
Vermont	1,073	56.6			59	3.1	765	40.3	1,897
Massachusetts	22,398	92.9			1,212	5.0	500	2.1	24,110
Rhode Island	2,620	88.6			140	4.7	197	6.7	2,957
Connecticut	7,173	87.6			324	4.0	691	8.4	8,188
Middle Atlantic	94,878	76.0	20,531	16.5	5,528	4.4	3,822	3.1	124,759
New York	68,736	94.1			2,613	3.6	1,664	2.3	73,013
New Jersey	10,419	61.2	5,521	32.4	804	4.7	294	1.7	17,038
Pennsylvania	15,723	45.3	15,010	43.2	2,111	6.1	1,864	5.4	34,708
East North Central	73,321	76.9	14,206	14.9	5,356	5.6	2,403	2.5	95,286
Ohio	18,950	89.2	330	1.6	1,079	5.1	876	4.1	21,235
Indiana	8,149	89.6			878	9.7	68	.7	9,095
Illinois	32,583	93.5			1,834	5.3	416	1.2	34,833
Michigan	11,550	68.6	3,685	21.9	965	5.7	632	3.8	16,832
Wisconsin	2,089	15.7	10,191	76.7	600	4.5	411	3.1	13,291

[1] Includes patients hospitalized at Medical Center for Federal Prisoners, Springfield, Mo.

TABLE 2.—*Census of patients in hospitals for mental disease by type of control, January 1, 1939*—Continued

Region and State	State		City and county		Veterans		Private		Total (number)
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
West North Central	36,546	80.2	5,084	11.2	3,089	6.8	870	1.9	45,589
Minnesota	9,669	92.1			737	7.0	98	.9	10,504
Iowa	6,699	73.2	1,556	17.0	520	5.7	381	4.2	9,156
Missouri	8,164	62.8	3,528	27.1	976	7.5	333	2.6	13,001
North Dakota	1,862	93.2			135	6.8			1,997
South Dakota	1,621	93.1			121	6.9			1,742
Nebraska	3,557	93.1			262	6.9			3,819
Kansas	4,974	92.6			338	6.3	58	1.1	5,370
South Atlantic (excluding District of Columbia)	42,797	90.4	86	.2	2,901	6.1	1,559	3.3	47,343
Delaware	1,169	95.8			51	4.2			1,220
Maryland	6,408	80.0	86	1.1	450	5.6	1,063	13.3	8,007
Virginia	8,909	92.5			554	5.8	164	1.7	9,627
West Virginia	3,872	92.3			325	7.7			4,197
North Carolina	6,459	92.7			386	5.5	121	1.7	6,966
South Carolina	4,372	93.6			276	5.9	21	.4	4,669
Georgia	7,243	91.7			517	6.5	142	1.8	7,902
Florida	4,365	91.8			342	7.2	48	1.0	4,755
District of Columbia	6,356	96.3			223	3.4	18	.3	6,597
East South Central	21,126	89.0	659	2.8	1,737	7.3	209	.9	23,731
Kentucky	6,195	90.8			541	7.9	87	1.3	6,823
Tennessee	5,407	81.6	659	9.9	486	7.3	77	1.2	6,629
Alabama	5,435	92.4			424	7.2	25	.4	5,884
Mississippi	4,089	93.0			286	6.5	20	.5	4,395
West South Central	27,835	90.8	70	.2	2,273	7.4	489	1.6	30,667
Arkansas	4,219	91.5			394	8.5			4,613
Louisiana	6,212	89.1	70	1.0	413	5.9	278	4.0	6,973
Oklahoma	7,052	95.7			273	3.7	41	.6	7,366
Texas	10,352	88.4			1,193	10.2	170	1.5	11,715
Mountain	10,194	90.3			874	7.7	224	2.0	11,292
Montana	1,904	93.7			128	6.3			2,032
Idaho	762	89.6			88	10.4			850
Wyoming	623	87.4			90	12.6			713
Colorado	3,816	88.1			290	6.7	224	5.2	4,330
New Mexico	821	89.5			96	10.5			917
Arizona	898	92.5			73	7.5			971
Utah	1,025	91.9			90	8.1			1,115
Nevada	345	94.8			19	5.2			364
Pacific	31,544	89.5	549	1.6	2,130	6.0	1,027	2.9	35,250
Washington	6,348	92.5			461	6.7	50	.7	6,859
Oregon	3,902	93.5			264	6.3	7	.2	4,173
California	21,294	87.9	549	2.3	1,405	5.8	970	4.0	24,218

6. PSYCHOPATHIC HOSPITALS AND SERVICES

Special service is organized in many communities for the immediate reception of patients with mental illness. If such a service fills a whole hospital it is commonly called a psychopathic hospital. If it is only one unit in a hospital that has other services, it is called a psychopathic service or a psychiatric service.

The Boston Psychopathic Hospital is now the oldest surviving representative of the first group. Opened in 1912, it was designed to receive all new admissions in the metropolitan area of Massachusetts. It was expected to admit, give immediate treatment, and classify and distribute patients to other State hospitals where they might be under care as long as necessary. Its floor plans were very carefully adjusted to these purposes, and later inclusion of other activities, though called

for by psychiatric progress, has lessened rather than increased the smoothness of its functioning. Its 112 beds are divided into several units and are distributed between single rooms and small dormitories. Provision was made for laboratories, for conference rooms, and for living quarters for the resident staff. Many families are more willing to send a mentally ill member to this type of institution than directly to one of the large State hospitals where custody is known to be an important function, and where, in the opinion of the less informed members of the community, treatment is not given so actively.

Psychiatric services in general hospitals are increasingly popular and their number is steadily growing. There are known to be 70 services, ranging in size from 6 to 600 beds. The larger services are in public hospitals and serve as collecting points for patients to pass on to State institutions. A great many patients, however, recover after a few days' or weeks' treatment and return to their homes.

These organizations regularly work under different laws from the ordinary State institution. It is much easier to obtain admission of a patient, and in many States he may be detained, if in the judgment of the chief resident this is necessary, for periods of from 5 to 30 days. Since legal formalities are less oppressive and residence is shorter, the community attaches less stigma to a period of study and treatment in such a service.

The distribution of psychiatric services in general hospitals (for temporary care), by regions and States, is shown in table 3.

TABLE 3.—*Number of general hospitals having psychiatric wards, by States, 1938*

Region and State	Number of wards	Region and State	Number of wards	Region and State	Number of wards
United States	70	West North Central	12	West South Central	4
		Minnesota	3	Arkansas	0
New England	6	Iowa	2	Louisiana	0
Maine	0	Missouri	2	Oklahoma	0
New Hampshire	0	North Dakota	0	Texas	4
Vermont	0	South Dakota	0		
Massachusetts	2	Nebraska	4	Mountain	0
Rhode Island	1	Kansas	1	Montana	0
Connecticut	3			Idaho	0
		South Atlantic	7	Wyoming	0
		Delaware	0	Colorado	0
Middle Atlantic	16	Maryland	1	New Mexico	0
New York	12	District of Columbia	3	Arizona	0
New Jersey	2	Virginia	2	Utah	0
Pennsylvania	2	West Virginia	0	Nevada	0
		North Carolina	0		
		South Carolina	0	Pacific	11
East North Central	14	Georgia	0	Washington	2
Ohio	4	Florida	1	Oregon	0
Indiana	1			California	9
Illinois	3	East South Central	0		
Michigan	3	Kentucky	0		
Wisconsin	3	Tennessee	0		
		Alabama	0		
		Mississippi	0		

VII. Contrasts

The incidence of mental illness of such severity that treatment is best carried on in an institution is so frequent that it is a major

problem of present-day medicine. More than half of those who occupy hospital beds in this country each day are patients in mental hospitals. It has been calculated that one in 20 of the population of New York State at some time in his life will be under care in a mental hospital. The number of patients hospitalized has increased steadily for several decades. This trend is especially noteworthy in the United States but is general in any part of the world where good hospitals exist.

It has been remarked that psychiatry was formerly a thoroughly accepted branch of medicine and a matter of deep interest not only to those who had relations with mental hospitals but also to other leaders of the medical profession (e. g., David Hosack, 1769–1835). Development of the great body of knowledge about infection in the last quarter of the nineteenth century and the early part of the twentieth produced an attitude on the part of many physicians that was inhospitable to the consideration of mental disturbance except as evidence of structural change in the central nervous system; for a time it seemed as if mental hospital physicians were somewhat out of the current of medical thought and pursuing matters that were detached, abstruse, metaphysical, and not soundly grounded in science. While the extent of this cleavage between psychiatry and other medical work has been exaggerated in some semipopular presentations it was genuine enough so that even now an apologetic chagrin about their work can be found among some mental hospital physicians and an attitude of tolerant disdain may be observed on the part of some specialists in other branches of medicine.

Ninety-seven percent of the hospitalized mental patients are in public mental institutions. This situation places psychiatry towards the head of the branches of medicine that are well socialized and perhaps lends piquancy to the study of a situation that is not satisfactory, but is so well established as to be generally accepted by the public. The mental hospitals are likely to be placed under a board or director of welfare; hence in a large number of the States it is considered entirely natural that the direction of mental hospital affairs should be in lay hands.

Such a situation has naturally involved a standard of support that is pitifully meager in comparison with funds supplied to other hospitals. None except the public mental hospital is expected to operate on $1 a day per patient, or even less. Even incorporated benevolent mental hospitals have been expected to carry on their work with inadequate endowment and with no supporting body to obtain donations. Medical and nursing standards, and standards in all types of therapy have been affected unfavorably, as is shown by any comparison of the personnel of the mental hospital with that of the general hospital.

Unhappy contrasts exist not only between the ideal and the actual but also between the better-supported mental hospitals and the meagerly supported. Ratios of medical staffs to patients range from 1:95 up to 1:1,090, and those of nursing personnel from 1:5.5 up to 1:35. Consulting staffs in some places are large and hold regular meetings at the hospital, whereas some institutions have no definite arrangement even for calling in consultants. The young physician may receive very good training in his specialty, or very little; of course he always has the opportunity to learn from his own experience, but the trial and error method cannot be dignified by the term "training." Even examining rooms on many medical services have to be shared with persons coming into the ward on any casual errand. Clinical histories range from very carefully compiled and illuminating documents down to scraps of information that are disconnected, fragmentary, and misleading. Some hospitals are so crowded that in order to improve the classification by transferring a patient to another ward it may be necessary to make two or three transfers; under such circumstances patients of discordant types are quartered together. Even the adequacy of provision for the physically sick varies too greatly. Roentgenology is in some places so poorly developed that a thorough tuberculosis survey is impossible. Medical libraries range from 7,000 volumes down to a few old books of only antiquarian interest. Nursing is of all stages of effectiveness. It is hard to think of an institution as a hospital when it employs not even one registered nurse, but such there have been. In a few institutions mechanical restraint and seclusion are not used at all, while they are very freely resorted to in others.

Only 15 States have established out-patient clinical services. Only 8 States legally specify that mental hospital superintendents must have had a definite number of years of psychiatric experience. In 14 States every change of administration produces political interference with the personnel of hospitals, and in 8 more this happens occasionally. One State spent only 29.61 cents a day per patient in 1938 at its mental hospital. The number of available beds for all classes of mental patients varies from 175 to 688 per 100,000. Such matters are presented in more detail in later sections.

There is a strong movement towards better organization of the activities of mental hospitals so as to give definite educational training to officers and personnel. The need—and demand—of the younger physicians for organization of their work so that they may study and learn more during their early years on a staff have been given attention in many parts of the country. The training of nurses, though hampered in many places by difficulties, either inherent or artificial, is a matter of grave concern and much study. Courses for attendants, differing in scope but all with the same objective, are given in many

hospitals. The work of therapeutic aides and of other persons who have personal contact with the patients is being restudied from an educational viewpoint. It is generally agreed among progressive administrators that the most wholesome, and therefore the most helpful, atmosphere for patients is one in which the hospital workers feel that they are not only doing a day's work but also learning; the patients get the most intelligent and most effective treatment under these conditions.

VIII. Number, Size, and Distribution of Mental Hospitals

There are 557 institutions recognized for the treatment of mental disorders. As shown in table 1, 122 are controlled by cities or counties, 182 by States, the District of Columbia, and the United States Department of Justice, 27 by the Veterans Administration, and 226 are privately controlled.

The institutions are grouped by size in table 4. Mental hospitals range from a few hundred to over 8,000 beds. It has been said that when the census of patients rises much above 1,500, certain facilities and certain staff positions begin to require duplication.

TABLE 4.—*Reported bed capacity of hospitals for mental disease, by size, January 1, 1939*

Region and State	1–499			500–1,499			1,500–2,999		3,000–4,499		4,500 and over	
	State	City, county, and veterans' hospitals	Private	State	City, county, and veterans' hospitals	Private	State	City, county, and veterans' hospitals	State	City and county	State	City and county
United States	12	113	223	32	21	3	90	10	26	3	10	[1] 1
New England	1	1	31	5	1	1	11		3			
Maine			2	1			1					
New Hampshire							1					
Vermont			1	1		1						
Massachusetts	1	1	12	2	1		9					
Rhode Island			2						1			
Connecticut			14	1					2			
Middle Atlantic	2	9	49	1	8	1	14	4	7	1	6	[1] 1
New York	2		28		1		7	1	6		5	
New Jersey		3	7		2		2	2			1	
Pennsylvania		6	14	1	5	1	5	1	1	1		[1] 1
East North Central	2	40	45	4	3		18	4	4	1	2	
Ohio		1	15		1		6		1			
Indiana			3	1			4	1				
Illinois	1	1	14				4	2	3		2	
Michigan		1	5	1	1		4			1		
Wisconsin	1	37	8	2	1			1				
West North Central	1	55	19	7	2		16			1		
Minnesota			6	4	1		3					
Iowa	1	55	3		1		4					
Missouri			8				4			1		
North Dakota							1					
South Dakota							1					
Nebraska				2			1					
Kansas			2	1			2					

[1] Now the Philadelphia State Hospital.

TABLE 4.—*Reported bed capacity of hospitals for mental disease, by size, January 1, 1939*—Continued

Region and State	1–499			500–1,499			1,500–2,999		3,000–4,499		4,500 and over	
	State	City, county, and veterans' hospitals	Private	State	City, county, and veterans' hospitals	Private	State	City, county, and veterans' hospitals	State	City and county	State	City and county
South Atlantic (excluding District of Columbia)	1		25	6	4	1	8		3		1	
Delaware				1								
Maryland			8	2	2	1	2					
Virginia			3	1	1		2		1			
West Virginia	1			2			1					
North Carolina			6				3					
South Carolina			1						1			
Georgia			3		1						1	
Florida			4						1			
District of Columbia			1								1	
East South Central		3	12	1	1		7		2			
Kentucky		1	5				3					
Tennessee		1	4		1		3					
Alabama			1				1		1			
Mississippi		1	2	1					1			
West South Central	1	2	12	2	1		8		2			
Arkansas					1				1			
Louisiana		1	2				1		1			
Oklahoma			2	2			2					
Texas	1	1	8				5					
Mountain	3	2	3	5			1		1			
Montana							1					
Idaho	1			1								
Wyoming		1		1								
Colorado	1	1	3						1			
New Mexico				1								
Arizona				1								
Utah				1								
Nevada	1											
Pacific	1	1	26	1	1		7	2	4			
Washington		1	3				3					
Oregon			1	1	1		1	1				
California	1		22				3	1	4			

Constantly increasing patient population has resulted in the building of hospitals too large for most effective administration. In many States it is the practice for State hospitals to continue expanding in bed capacity far beyond the number for which the original plans were intended.

Hospitals for mental disease under all types of control have been arranged in five categories, with State and private hospitals indicated separately, and city, county, and veterans' hospitals grouped together.

Among State hospitals, there are 90 with bed capacity between 1,500 and 2,999. An almost equal number fall above and below that range. The majority of other hospitals have fewer than 500 beds.

In only the Mountain region is there a greater number of State hospitals with between 500 and 1,499 beds than in the next larger category.

In general, the multiplication of a facility increases its use. The highest hospital admission rate is likely to be from the neighborhood of the hospital. There seems, however, to be a considerable degree of discrimination on the part of the public between different types of mental institutions. If all types were held in the same esteem, States with the broadest distribution of institutions should treat proportionately more patients since every family in the State would be near a hospital. This is not the case. On the other hand, it may be claimed that there is some relation between the number of patients treated and the average area served by the hospitals. Table 5 shows, for each State, the number of State hospitals, the number of county and city institutions that give prolonged care to the mentally sick, the number of patients in each, the hospitalization rate, and also the area served by each institution or the average in a State. The highest hospitalization rate is in New York where good hospitals are easily accessible to almost the entire population of the State.

TABLE 5.—*Patients with mental disease in State, city, and county hospitals, number of hospitals, area served, and hospitalization rates, 1938*

Region and State	Census			Number of hospitals			Area served, square miles	Hospitalization rate per 100,000 of total population aged 15 and over
	State hospitals	City and county hospitals	Total	State hospitals	City and county hospitals	Total		
United States	367,456	40,772	408,228	182	122	304	9,957	485.3
New England	37,371	----------	37,371	22	----------	22	3,019	677.8
Maine	2,588	----------	2,588	2	----------	2	16,520	458.1
New Hampshire	2,031	----------	2,031	1	----------	1	9,341	598.2
Vermont	1,039	----------	1,039	1	----------	1	9,564	723.7
Massachusetts	22,256	----------	22,256	14	----------	14	590	757.0
Rhode Island	2,454	----------	2,454	1	----------	1	1,248	545.2
Connecticut	7,003	----------	7,003	3	----------	3	1,655	654.8
Middle Atlantic	93,841	20,413	114,254	33	19	52	1,972	619.2
New York	68,521	----------	68,521	22	----------	22	2,237	727.0
New Jersey	10,099	5,403	15,502	3	6	9	914	549.4
Pennsylvania	15,221	15,010	30,231	8	13	21	2,149	494.6
East North Central	68,911	14,076	82,987	35	42	77	3,222	472.5
Ohio	18,347	264	18,611	8	1	9	4,560	412.2
Indiana	7,941	----------	7,941	6	----------	6	6,059	361.4
Illinois	29,879	----------	29,879	11	----------	11	5,151	552.2
Michigan	10,943	3,621	14,564	6	2	8	7,248	437.9
Wisconsin	1,801	10,191	11,992	4	39	43	1,304	586.7
West North Central	34,861	4,967	39,828	26	56	82	6,322	455.9
Minnesota	9,265	----------	9,265	7	----------	7	12,097	513.9
Iowa	6,484	1,556	8,040	6	55	61	920	492.2
Missouri	7,421	3,411	10,832	4	1	5	13,884	440.0
North Dakota	1,849	----------	1,849	1	----------	1	70,837	466.7
South Dakota	1,604	----------	1,604	1	----------	1	77,615	393.8
Nebraska	3,322	----------	3,322	3	----------	3	25,840	385.1
Kansas	4,916	----------	4,916	4	----------	4	20,540	411.9

TABLE 5.—*Patients with mental disease in State, city, and county hospitals, number of hospitals, area served, and hospitalization rates, 1938*—Continued

Region and State	Census			Number of hospitals			Area served, square miles	Hospitalization rate per 100,000 of total population aged 15 and over
	State hospitals	City and county hospitals	Total	State hospitals	City and county hospitals	Total		
South Atlantic (excluding District of Columbia)	39,554	86	39,640	19	1	20	14,142	383.2
Delaware	1,126		1,126	1		1	2,370	613.0
Maryland	6,052	86	6,138	4	1	5	2,465	593.4
Virginia	8,054		8,054	4		4	10,657	500.8
West Virginia	2,898		2,898	4		4	6,043	267.4
North Carolina	5,866		5,866	3		3	17,475	291.5
South Carolina	4,372		4,372	1		1	30,989	403.2
Georgia	7,236		7,236	1		1	59,265	391.0
Florida	3,950		3,950	1		1	58,666	334.5
District of Columbia	6,356		6,356	1		1	70	1,296.2
East South Central	20,385	611	20,996	10	2	12	15,124	328.9
Kentucky	5,895		5,895	3		3	13,533	350.9
Tennessee	5,307	611	5,918	3	2	5	8,404	337.1
Alabama	5,135		5,135	2		2	25,999	310.0
Mississippi	4,048		4,048	2		2	23,433	312.2
West South Central	26,080	70	26,150	13	1	14	31,271	333.6
Arkansas	3,030		3,030	1		1	53,335	271.4
Louisiana	6,069	70	6,139	2	1	3	16,169	441.3
Oklahoma	6,825		6,825	4		4	17,514	459.4
Texas	10,156		10,156	6		6	44,316	268.0
Mountain	9,411		9,411	10		10	86,502	375.8
Montana	1,758		1,758	1		1	146,997	481.7
Idaho	761		761	2		2	41,944	245.4
Wyoming	570		570	1		1	97,914	381.8
Colorado	3,538		3,538	2		2	51,974	511.8
New Mexico	789		789	1		1	122,634	269.4
Arizona	848		848	1		1	113,956	279.6
Utah	836		836	1		1	84,990	274.8
Nevada	311		311	1		1	110,690	402.6
Pacific	30,686	549	31,235	13	1	14	23,152	470.6
Washington	6,188		6,188	3		3	23,042	520.1
Oregon	3,809		3,809	2		2	48,350	502.9
California	20,689	549	21,238	8	1	9	17,589	452.8

IX. Administrative Organization

Details of supervisory and control organizations differ widely in the several States. The types of organizations exercising control may be grouped as follows:

1. An administrative board consisting of elected officers.
2. An administrative board whose members are appointed by the Governor, perhaps for overlapping terms.
3. A board one of whose members or whose principal employee gives most or all of his time to the activities of the institutions and other official projects in the field of mental health.
4. A bureau responsible for mental health activities, as one of several units in a large State department.
5. An independent department headed by a board or a commissioner, assisted by local institutional boards with limited powers.

In 21 States control is exercised through a central board appointed by the Governor. Some of these States have only one mental hospital.

In 5 States the hospitals are controlled by local boards appointed by the Governor. Two States have central boards but the dominant factor in administration is the local board for each hospital. In 6 States control is centered in a board consisting of the Governor and one or more cabinet members. In 14 States the hospitals are controlled by a director or commissioner appointed by the Governor as the head of an existing bureau or department.

In 27 States by law and in 8 by inference the prisons are included among the responsibilities of the central control agency. In 4 States—Kentucky, North Carolina, Ohio, and Pennsylvania—special bureaus of mental health exist in a welfare department. In 1 State, Louisiana, the local boards for the hospitals are subject to no central State agency except the Governor. In only 12 States has the central board been created for the exclusive purpose of dealing with matters of mental health. Three States and the District of Columbia have miscellaneous types of control.

A study has been made of the relation of the various types of administrative control to efficiency and freedom from selfish interests in the administration. It was found that there is no parallel. A high degree of centralized power may be accompanied by political domination of appointments and purchases. But the same prostitution of the needs of the mentally sick to private selfishness may be found under quite the opposite type of organization.

It has long been known that in the United States there can be found the widest range of adequacy in mental institutions. Some are well planned, soundly built, efficiently equipped, well staffed, supplied with an intelligent and loyal personnel, and indeed prepared to do for the mentally sick all the things that are known to be beneficial. On the other hand there are wretched institutions, poorly planned, ill-constructed, unrepaired, operated by ignorant officers, and devoted to the theory that the public service belongs to whatever political faction may be in power, and that the welfare of the patient is of minor importance. A condensed survey report of this nature can hardly set forth all the unpleasant facts in this field, nor even all the pleasant ones. Usually no secret is made of this type of mismanagement. When physicians and nurses (if there be any) and attendants and business staff are repeatedly chosen without regard to fitness, the whole community knows it. When political levies are regularly made on the salaries of employees, it is freely mentioned. When maintenance funds are skimped and the hospital is shabby, although alongside it may stand another type of State institution that is well kept up, citizens see the contrast and by their indifference, or from lack of organized provision for exercising their influence, condone the divergent standards.

X. Plant, Capacity, and Crowding

Several styles of grouping for patients' buildings have been followed:

1. The so-called Kirkbride style, a series of blocks attached one to the other.
2. Occasionally one finds an institution with a long front, even a thousand feet or more, and a series of wings running towards the back or en echelon.
3. A few corridor hospitals have blocks set off towards the exterior, leaving a large court within; in one instance an area of 11 acres is thus enclosed.
4. The so-called cottage type consists of separate buildings; the "cottages" house from 20 to 200 or more patients.

The original building of the Eastern State Hospital at Lexington, Ky., dating from 1828, the original hospital building at Worcester, Mass., the main building at Utica, N. Y., and many others erected during the nineteenth century were very fine structures for their period. They are spacious, ceilings range from 10 to 17 feet high; corridors are 10, 12, or 14 feet wide; rooms are so large that in later times two or even three beds have been crowded into space that was intended for but one patient. Windows are generally adequate. Interior brick and stone walls often extended from basement to ceiling. Beams, unfortunately, were wooden, and in the older structures wooden lath, the only type then in existence, was used throughout. As time passed and wood grew dry the fire risks became very great, although these structures represented the best standards of their day.

The utilities in such buildings were not always given adequate space; plumbing may have been somewhat skimped; less clothing was provided then and therefore less clothing-room space; rooms for nurses' equipment and supplies, record rooms, and linen closets may not be adequate for present needs but there has usually been space enough so that the remodeller has been able to supplement the original installation. Sitting rooms in these old buildings are usually attractive, and if porches were provided and later generations did not glaze them they afforded delightful views over agreeable lawns or across pleasant courts.

Wards for disturbed patients in the older buildings were rather bleak and bare. The corridors of such wards are narrower than others. Sitting room space is often skimped. Ornamentation is likely to be absent, and rooms too often have high placed and perhaps narrow windows. The number of patients that would have to be accommodated in such wards was often underestimated.

The better institutions have fine assembly halls. At an earlier period these were often placed on an upper floor, in the administration building, usually in a wing running back from the center block. If they were detached buildings, they might be found anywhere on

the grounds. They served as lecture and concert halls on weekdays, as ballrooms periodically, and on Sunday as chapels. Of late years they have also become gymnasiums.

Many types of buildings are required in these institutions, the population of which runs from that of a village to that of a small city. One group comprises occupational buildings, housing the industries that are necessary for the comfortable operation of the institution, such as the laundry, sewing-room, tailor shop, and shops for repairing furniture, mattress-making, and other necessities of institution life. The special activities included under the term "occupational therapy" comprise so much of the esthetic as well as the useful that they tend to win special housing. Many of the best occupational therapy buildings are of the shop type, especially when designed for men. Others, and more often those for women, are attractive structures in which the needs of function have been supplemented by skillful attention to the artistic possibilities of surrounding work with beauty.

With advances in engineering, some types of structure in the hospital plant have been transformed. The power plant of today with its elaborate machinery for handling fuel and waste, the storeroom with extensive refrigeration quite independent of the amount of ice that nature has provided in the previous winter, the dairy barn with its metal installations and its high standards of cleanliness all reflect changes in engineering and architectural practice.

There is no single standard of capacity, and in very few places does rated capacity determine the number of patients under care. Even in those States which at times refuse admission and allow patients to accumulate in jails and almshouses the official capacity is usually overrun.

Figures of capacity are given in table 6 for State hospitals only. The annual Hospital Number of the Journal of the American Medical Association, while omitting rated capacity, has reported numbers of beds for hospitals under all types of control in 1938. These figures have not been used, first, because private hospitals are rarely, if ever, overcrowded, so that combined figures for all hospitals would be meaningless; and, second, because the number of beds in a hospital is rarely synonymous with rated capacity.

In State hospitals in 1938 there was reported to be a capacity of 340,633 beds for the 376,873 patients under treatment. The overcrowding was 10.6 percent.

Seven of the States indicated a surplus of beds over resident population. Probably this is not indicative of an oversupply of hospital beds in these States but rather an overrating of capacity. It may indicate the failure of a State to hospitalize the mentally ill in need of treatment.

In one State all the hospitals but one were overcrowded; an extensive building program in that one hospital had resulted in apparent undercrowding in the entire State.

Several standards of space have been officially adopted, whether or not they are observed. They are noted in table 7.

TABLE 6.—*Reported overcrowding in State hospitals for mental disease, 1938*

Region and State	Average daily patient population	Reported capacity	Overcrowding	
			Number	Percent
United States	376,873	340,633	36,240	10.6
New England	36,698	31,501	5,197	16.5
Maine	2,633	2,376	257	10.8
New Hampshire	2,091	1,650	441	26.7
Vermont	1,054	833	221	26.5
Massachusetts	21,098	18,507	2,591	14.0
Rhode Island	2,617	3,000	−383	−12.8
Connecticut	7,205	5,135	2,070	40.3
Middle Atlantic	95,439	84,452	10,987	13.0
New York	69,823	62,713	7,110	11.3
New Jersey	10,405	7,910	2,495	31.5
Pennsylvania	15,211	13,829	1,382	10.0
East North Central	68,675	64,602	4,073	6.3
Ohio	18,287	14,147	4,140	29.3
Indiana	8,183	8,027	156	1.9
Illinois	28,876	30,679	−1,803	−5.9
Michigan	11,228	9,947	1,281	12.9
Wisconsin	2,101	1,802	299	16.6
West North Central	36,705	34,602	2,103	6.1
Minnesota	10,003	10,296	−293	−2.8
Iowa	6,695	5,034	1,661	33.0
Missouri	8,061	7,923	138	1.7
North Dakota	1,818	2,000	−182	−9.1
South Dakota	1,623	1,600	23	1.4
Nebraska	3,849	3,400	449	13.2
Kansas	4,656	4,349	307	7.1
South Atlantic (excluding District of Columbia)	41,803	37,510	4,293	11.4
Delaware	1,143	890	253	28.4
Maryland	6,325	6,128	197	3.2
Virginia	8,795	8,650	145	1.7
West Virginia	3,468	2,990	478	16.0
North Carolina	6,511	6,100	411	6.7
South Carolina	4,171	3,752	419	11.2
Georgia	7,187	5,000	2,187	43.7
Florida	4,203	4,000	203	5.1
District of Columbia	5,810	6,043	−233	−3.9
East South Central	20,940	17,845	3,095	17.3
Kentucky	6,269	4,400	1,869	42.5
Tennessee	5,213	5,045	168	3.3
Alabama	5,423	4,300	1,123	26.1
Mississippi	4,035	4,100	−65	−1.6
West South Central	28,888	27,612	1,276	4.6
Arkansas	4,107	3,570	537	15.0
Louisiana	5,548	5,900	−352	−6.0
Oklahoma	7,172	5,870	1,302	22.2
Texas	12,061	12,272	−211	−1.7
Mountain	10,176	9,060	1,116	12.3
Montana	1,897	1,715	182	10.6
Idaho	934	920	14	1.5
Wyoming	557	610	−53	8.7
Colorado	3,650	2,760	890	32.2
New Mexico	789	715	74	10.3
Arizona	860	928	−68	−7.3
Utah	1,123	1,066	57	5.3
Nevada	366	346	20	5.8
Pacific	31,739	27,406	4,333	15.8
Washington	6,096	5,856	240	4.1
Oregon	3,918	3,750	168	4.5
California	21,725	17,800	3,925	22.1

TABLE 7.—*Space allowance per patient in mental hospitals (per square foot)*

	Dormitory	Bedroom	Sitting room	Dining room
Maine	50	80	50	15
Massachusetts	50	100	30	12 [1] 8
New Jersey	55	95	45–50	15
New York	43	70	30	15
Pennsylvania	50	80	50	15
South Carolina [2]	50	90–100	18–20	15
Veterans Administration:				
Acute, continued treatment, and parole buildings	[3] 50–80	75	32½–37½	13
Infirmary	[3] 55–65	90	27½	13
Tuberculous	75	90–100	27½	13
Virginia	45	85	50	10

[1] This figure, 8 square feet, is for cafeterias.
[2] Infirmary wards, 100 square feet.
[3] Varies according to ventilation.

The veterans' hospitals present an exception to the general practice of overcrowding. They adhere closely to the official figures as regards the number of patients under care. It cannot be said that any great hardship is inflicted by the refusal of a veterans' hospital to receive a patient at the moment when his condition demands hospitalization, since every veteran is a citizen of some State and can therefore be cared for in a State hospital until there is a vacant bed in the proper Veterans Facility.

XI. Patient Population

The census and movement of population in mental institutions are available for the year 1938.

The patient population of hospitals for mental disease rarely consists of psychotic patients alone, but, in varying measure, patients without psychosis also are cared for. They may be mentally deficient, epileptic, alcoholic, or may fall into one of several other categories. The proportion of patients without psychosis varies, it has been found, from 0.6 to 7.3 percent, when considered regionally. When attempting to compare rates of prevalence and incidence of hospitalized mental disease among the States, a total rate based upon all patients in the hospital would consequently be subject to considerable error.

In order to present an adequate picture of all institutionalized mental patients in table 8, data from institutions for mental deficiency and epilepsy have been combined with hospitals for mental disease and separate rates have been presented for patients with mental disease, mental deficiency without psychosis, epilepsy without psychosis, and others without psychosis. This and the table concerning first admission rates are the only ones in which discussion of patients in institutions for mental deficiency and epilepsy is introduced.

Because of the differing age distribution of the general population in each State, corrected rates computed on the basis of those age ranges

in which each disorder commonly occurs were employed. In the case of mental disease the population aged 15 and over has been utilized. In the United States 485 per 100,000 persons aged 15 and over are hospitalized for mental disease. In those States in which the provision of hospital beds is more nearly adequate, the rates of hospitalization are higher. The rates in New York and Massachusetts, 727 and 757 per 100,000 aged 15 and over, respectively, are highest among the States. The lowest mental disease rate is in West Virginia. The New England and Middle Atlantic regions stand highest among the regions, with the East North Central States third. The lowest rates are found in the East South Central and West South Central regions.

Any interpretation of interstate variation should take into consideration rates for each individual psychosis, or at least for groups of psychoses. This presentation is not available in the present study. However, various facts that have been previously determined for State hospitals bear repetition. The psychoses of old age (senile dementia and cerebral arteriosclerosis) do not show as great variation in rate among the regions as do conditions due to exogenous causes (alcoholic psychoses, psychoses with syphilis and psychoses due to drugs, etc.) or those of psychogenic origin (dementia praecox, manic-depressive psychosis, paranoia or paranoid conditions, involutional melancholia, psychoneuroses and neuroses, and psychopathic personality with psychosis). Much of the interregional variation in the total mental disease rate is caused by differences in hospitalization rates for dementia praecox and manic-depressive psychosis, which together constitute 57 percent of the resident population of State hospitals. These patients would probably constitute a slightly lower proportion in hospitals under all types of control, since there is a greater proportion of paresis in veterans' hospitals and of the psychoneuroses in private hospitals.

The rate for mental deficiency is based on the general population in the age range 5 to 49 and in the country as a whole is 98.2 per 100,000. By States, the highest rate is in Delaware, while the region with the highest rate is New England. The consistently low rate throughout the South and Southwest is caused to some extent by vagaries of clinical diagnosis. Virginia is the only southern State which has provided a separate institution for Negro mental defectives. This institution was opened at Petersburg in January 1939, and figures for it are not given in this report. In other States the Negro patient is admitted to a State hospital for mental disease; he may be more readily accepted if his condition is psychotic. Were it possible to combine rates for mental deficiency with and without psychosis, the total rates would tend to be somewhat more uniform, although the variation among the States would still be wide.

A similar situation obtains insofar as epilepsy is concerned. A few

States had no patients diagnosed as epileptic without psychosis in their hospitals. The highest rate among the States is in Kansas—54.8 per 100,000 aged 5 to 54. This high rate indicates another moot factor entering into the comparison. Patients with both mental deficiency and epilepsy may, in a single hospital or State, be preferentially diagnosed in one or the other category. In Kansas, while the epileptic rate is high, the mental deficiency rate is low, probably indicating greater inclination toward a diagnosis of epilepsy than obtains in other States. Likewise, Delaware with the highest rate for mental deficiency has a very low epileptic rate.

The rates for other conditions without psychosis vary widely. Because they embody so heterogeneous a group, small emphasis is placed on their significance.

TABLE 8.—*Hospitalization rates for mental patients in all institutions for mental disease, mental deficiency, and epilepsy, 1938*

Region and State	Mental disease		Mental deficiency [1]		Epilepsy [1]		Others [1]	
	Patients	Rate per 100,000 aged 15 and over	Patients	Rate per 100,000 aged 5–49	Patients	Rate per 100,000 aged 5–54	Patients	Rate per 100,000 aged 15 and over
United States	[2]447,321	485.3	94,284	98.2	21,026	20.6	6,634	7.2
New England	41,521	677.8	9,482	159.1	1,762	27.5	422	6.9
Maine	2,747	458.1	937	165.3	155	25.2	40	6.7
New Hampshire	2,134	598.2	669	204.0	11	3.2	81	22.7
Vermont	1,863	723.7	297	122.7			14	5.4
Massachusetts	23,968	757.0	5,730	186.5	1,249	37.7	102	3.3
Rhode Island	2,791	545.2	694	135.7	123	22.3	52	10.1
Connecticut	8,018	654.8	1,155	93.0	224	16.9	133	10.8
Middle Atlantic	123,604	619.2	27,423	135.4	5,427	25.0	498	2.5
New York	72,798	727.0	16,485	166.2	2,576	24.2	193	1.9
New Jersey	16,600	549.4	4,528	146.2	1,597	48.2	179	5.9
Pennsylvania	34,206	494.6	6,410	88.6	1,254	16.2	126	1.9
East North Central	90,746	472.5	24,262	125.6	5,243	25.2	2,417	12.5
Ohio	20,566	412.2	5,477	110.1	1,712	32.1	319	6.3
Indiana	8,887	361.4	2,715	113.0	960	37.1	63	2.6
Illinois	32,129	552.2	7,368	126.3	1,430	23.0	1,616	27.7
Michigan	16,161	437.9	5,800	150.3	1,027	25.0	196	5.4
Wisconsin	13,003	586.7	2,902	129.6	114	4.9	223	10.1
West North Central	43,787	455.9	11,656	120.2	3,173	30.6	769	8.0
Minnesota	10,100	513.9	2,817	140.6	933	43.7	144	7.3
Iowa	8,941	492.2	2,856	160.6	455	23.8	193	10.6
Missouri	12,141	440.0	2,008	74.5	545	18.9	341	12.4
North Dakota	1,984	466.7	694	144.4	178	34.9	9	2.1
South Dakota	1,725	393.8	529	110.4	103	20.3	15	3.4
Nebraska	3,584	385.1	1,472	153.0	201	19.7	47	5.0
Kansas	5,312	411.9	1,280	99.3	758	54.8	20	1.5
South Atlantic (excluding District of Columbia)	44,100	383.2	6,232	48.0	1,757	12.7	592	5.2
Delaware	1,177	613.0	459	243.7	4	1.9	14	7.3
Maryland	7,651	593.4	1,230	93.8	173	12.3	79	6.1
Virginia	8,772	500.8	1,494	76.5	515	24.8	239	13.6
West Virginia	3,223	267.4	756	54.1	263	17.9	36	3.0
North Carolina	6,373	291.5	700	26.4	510	18.3	76	3.5
South Carolina	4,669	403.2	611	42.5	87	5.7	23	1.9
Georgia	7,895	391.0	315	13.5	18	.8	5	.3
Florida	4,340	334.5	667	48.5	187	12.8	120	9 5

[1] Without psychosis.
[2] Includes patients hospitalized at Medical Center for Federal Prisoners, Springfield, Mo.

TABLE 8.—*Hospitalization rates for mental patients in all institutions for mental disease, mental deficiency, and epilepsy, 1938*—Continued

Region and State	Mental disease		Mental deficiency		Epilepsy		Others	
	Patients	Rate per 100,000 aged 15 and over	Patients	Rate per 100,000 aged 5–49	Patients	Rate per 100,000 aged 5–54	Patients	Rate per 100,000 aged 15 and over
East South Central	22,942	328.9	2,630	33.4	394	4.7	260	3.7
Kentucky	6,523	350.9	864	42.6	166	7.7	159	8.5
Tennessee	6,481	337.1	664	31.3	81	3.6	48	2.5
Alabama	5,584	310.0	810	38.2	115	5.2	14	.8
Mississippi	4,354	312.2	292	18.0	32	1.9	39	2.8
West South Central	28,912	333.6	3,689	37.7	1,844	17.8	767	8.8
Arkansas	3,424	271.4	513	35.4	96	6.3	580	45.9
Louisiana	6,830	441.3	797	44.9	206	11.0	37	2.4
Oklahoma	7,139	459.4	992	56.3	264	14.2	66	4.2
Texas	11,519	268.0	1,387	28.7	1,278	25.2	84	1.9
Mountain	10,509	375.8	2,624	87.2	494	15.5	170	6.1
Montana	1,886	481.7	504	123.1	93	21.2	36	9.2
Idaho	849	245.4	379	100.4	130	32.3	1	.3
Wyoming	660	381.8	326	173.5	67	33.5	24	13.9
Colorado	4,052	511.8	773	96.4	89	10.3	49	6.2
New Mexico	885	269.4	66	17.1	5	1.3	32	9.8
Arizona	921	279.6	34	9.2			16	4.9
Utah	926	274.8	518	132.6	103	25.1	9	2.6
Nevada	330	402.6	24	30.6	7	8.2	3	3.7
Pacific	34,392	470.6	5,775	84.0	847	11.4	739	10.1
Washington	6,699	520.1	1,219	98.5	286	21.4	78	6.0
Oregon	4,080	502.9	986	128.5	5	.6	41	5.0
California	23,613	452.8	3,570	73.3	556	10.5	620	11.9

In computing rates of hospitalization in the foregoing table, patients in the psychopathic hospitals have not been included in the totals. There, patients are admitted for observation or for temporary treatment, after which they either proceed to a mental hospital or are discharged to the community. Many of these patients have psychoses of short duration. In Massachusetts, more than half have been found, after long periods of time, to seek no further hospitalization. There is diversity of opinion on the advisability of including these patients in a total hospitalization rate, and at the same time insuring comparability among the States. In States where there are no psychopathic hospitals it is questionable whether this same type of patient would enter a State hospital, be admitted to the psychiatric ward of a general hospital, if there is one, or perhaps be left to fend for himself in the community. In table 9, patients hospitalized in the six State psychopathic hospitals, Boston, Syracuse, New York State Psychiatric Institute, Cook County Psychopathic Hospital (Illinois), Iowa, and Galveston, as well as those in Colorado, have been added to patients enumerated in table 8 and all-inclusive rates computed for mental disease and for mental deficiency, epilepsy, and other conditions without psychosis. These rates in each case increase but slightly the mental disease rates and affect to a negligible degree all rates without psychosis.

TABLE 9.—*Hospitalization rates for mental patients in all institutions for mental disease, mental deficiency, and epilepsy, and in psychopathic hospitals in those States maintaining the latter type of institution, 1938*

Region and State	Mental disease		Mental deficiency [1]		Epilepsy [1]		Others [1]	
	Patients	Rate per 100,000 aged 15 and over	Patients	Rate per 100,000 aged 5–49	Patients	Rate per 100,000 aged 5–54	Patients	Rate per 100,000 aged 15 and over
New England:								
Massachusetts	24,029	758.9	5,732	186.7	1,249	37.7	116	3.7
Middle Atlantic:								
New York	73,468	733.6	16,518	166.4	2,581	24.2	311	3.1
East North Central:								
Illinois	32,249	554.2	7,369	126.3	1,430	23.0	1,625	28.0
West North Central:								
Iowa	8,969	493.7	2,856	160.6	455	23.8	198	10.9
West South Central:								
Texas	11,585	269.5	1,387	28.7	1,279	25.2	91	2.1
Mountain:								
Colorado	4,116	519.8	776	96.8	92	10.7	63	8.0

[1] Without psychosis.

The best index by which to gauge the present trend of mental disease is the rate of first admission. Comparison among the States has been drawn for the same broad categories of diagnosis that were utilized in the case of hospitalization, and the figures combine hospitals for mental disease with institutions for mental deficiency and epilepsy.

The rate of first admission is directly dependent upon the hospital facilities that are available and is influenced to a large extent by the accessibility of the hospital, the attitude of the community toward the care given its patients, and the comparative recency of organization of the hospital system.

First admission rates for mental disease run remarkably parallel to rates of hospitalization. This is to say, those States that have in the past provided hospitalization facilities in greater quantity apparently still continue to do so. For mental disease the rates are based on the population aged 15 and over and are highest in the New England, Middle Atlantic, and Pacific regions. The rates in the Mountain States are lowest, the average being only two-fifths of the rate in New York State.

For mental deficiency the first admission rates have been based on the general population aged 5 to 29. Mental defectives among first admissions comprise a more youthful population than do resident patients, since discharge in this diagnosis is infrequent. The rates show considerable variation. In Nevada there were no first admissions diagnosed in this category, while in New York the rate was 82.8 per 100,000 aged 5 to 29.

The average rate for epilepsy without psychosis in these institutions is 2.7 per 100,000 aged 5 to 54. In this instance the Wyoming rate, 7.6, is highest, with Nevada again showing no first admissions. On the whole, the rates for epilepsy are more uniform than those for mental deficiency.

The rates for other conditions without psychosis are in some instances relatively high. A possible explanation is the practice of admitting inebriates comparatively freely to the State hospitals in some States and excluding them in others. There is rapid turnover of patients in psychopathic hospitals; consequently the rates of first admission presented in the following table would be considerably augmented by inclusion of these patients. As would be expected, the greatest increase occurs in those conditions in which a psychosis is recognized. Information is not available as to the number of patients once admitted to each of these psychopathic hospitals who proceed to a mental hospital for prolonged treatment, and it is probable that some duplication results among reported first admissions to both types of hospitals. In Iowa, Texas, and Illinois, patients once treated in the Iowa State Psychopathic Hospital, Galveston State Psychopathic Hospital, or Cook County Hospital, although statistically designated as a first admission at that time, are again called first admissions upon subsequent care in a State hospital in one of those States. In Massachusetts, New York, and Colorado, a patient is designated as a readmission if he was at one time a patient in one of the State psychopathic hospitals. Because of the impossibility of presenting these rates on a comparable basis throughout, since so many varying factors must be taken into consideration, it is deemed wiser to exclude them from the study of first admission rates.

The remainder of the discussion of the patient population will be confined to State hospitals for mental disease. Inasmuch as State hospitals care for 83 percent of the entire patient population hospitalized for mental disease (table 2), any conclusions drawn on the basis of these data which are not all-inclusive are, nevertheless, valid. Many additional patients are State-supported, although hospitalized in county, city, or private institutions. These patients show distribution of diagnoses similar to State hospital patients. Patients in city and county hospitals comprise 9 percent of all hospitalized patients. Consequently only patients in veterans' and private hospitals, comprising 8 percent, will differ materially in distribution of diagnosis.

TABLE 10.—*First admission rates for mental patients in all institutions for mental disease, mental deficiency, and epilepsy, 1938*

Region and State	Mental disease		Mental deficiency [1]		Epilepsy [1]		Others [1]	
	Patients	Rate per 100,000 aged 15 and over	Patients	Rate per 100,000 aged 5–29	Patients	Rate per 100,000 aged 5–54	Patients	Rate per 100,000 aged 15 and over
United States	[2]103,567	112.7	13,297	22.0	2,770	2.7	13,516	14.7
New England	7,852	128.4	911	25.4	164	2.6	1,078	17.6
Maine	574	95.9	234	66.1	36	5.9	33	.6
New Hampshire	395	110.9	118	59.0	3	.8	52	14.6
Vermont	438	170.2	33	21.7	3	1.1	127	49.4
Massachusetts	3,884	122.7	390	21.4	87	2.6	422	13.3
Rhode Island	580	113.5	71	22.7	12	2.2	58	11.4
Connecticut	1,981	162.2	65	8.6	23	1.8	386	31.6
Middle Atlantic	27,021	135.7	5,823	47.5	622	2.9	1,089	5.5
New York	18,535	185.7	4,812	82.8	326	3.0	441	4.4
New Jersey	3,648	120.9	468	25.2	164	5.0	361	11.9
Pennsylvania	4,838	70.0	543	11.9	132	1.7	287	4.1
East North Central	21,048	109.8	2,531	21.7	723	3.4	3,364	19.3
Ohio	4,329	86.9	484	16.2	252	4.8	363	7.3
Indiana	1,883	76.8	196	13.3	121	4.7	132	5.4
Illinois	7,589	130.7	1,088	31.4	222	3.5	1,719	29.6
Michigan	3,694	100.6	377	16.1	109	2.7	784	21.3
Wisconsin	3,553	160.8	386	27.7	19	.8	366	16.4
West North Central	10,341	107.7	1,231	20.2	460	4.4	1,686	17.6
Minnesota	2,321	118.6	433	34.7	112	5.3	553	28.3
Iowa	1,697	93.6	171	15.6	61	3.2	415	22.8
Missouri	2,875	104.4	316	19.2	112	3.9	434	15.8
North Dakota	293	68.6	97	29.4	38	7.5	93	21.7
South Dakota	302	68.6	46	14.8	13	2.6	2	.4
Nebraska	699	75.0	124	20.1	21	2.1	110	11.8
Kansas	2,154	167.8	44	5.3	103	7.5	79	6.2
South Atlantic (excluding District of Columbia)	10,290	89.9	869	9.8	257	1.9	2,434	21.2
Delaware	278	145.3	88	76.5	1	.5	15	8.6
Maryland	1,880	146.6	143	17.7	18	1.3	295	22.6
Virginia	1,924	110.4	334	25.3	83	4.1	705	40.5
West Virginia	1,051	87.5	70	7.3	60	4.1	220	18.4
North Carolina	1,820	83.7	64	3.3	45	1.6	714	32.2
South Carolina	1,233	107.0	61	6.0	3	.2	145	33.1
Georgia	1,284	63.8	31	1.9	2	.1	270	13.3
Florida	820	64.1	78	9.0	45	3.2	70	54.1
East South Central	7,505	108.1	425	7.9	89	1.0	1,113	16.0
Kentucky	1,548	83.6	109	8.1	37	1.7	373	20.2
Tennessee	2,935	153.4	151	10.5	9	.4	336	17.5
Alabama	1,370	76.3	97	6.6	2	.1	193	10.8
Mississippi	1,652	118.9	68	6.1	41	2.4	211	15.2
West South Central	7,518	87.0	623	9.4	314	3.0	933	10.8
Arkansas	1,035	82.2	102	10.3	37	2.4	372	29.5
Louisiana	2,054	133.4	103	8.6	33	1.7	83	5.4
Oklahoma	1,426	91.7	149	12.4	25	1.4	58	3.8
Texas	3,003	70.2	269	8.5	219	4.4	420	10.0
Mountain	1,962	70.6	227	11.9	55	1.8	244	8.8
Montana	274	70.1	65	26.0	16	3.7	66	17.2
Idaho	228	66.4	42	17.1	3	.8	30	8.8
Wyoming	175	102.0	31	27.1	15	7.6	18	10.5
Colorado	583	73.9	60	12.1	8	.9	47	12.9
New Mexico	181	55.7	14	5.3	4	1.0	14	4.6
Arizona	225	68.7	8	3.3	7	1.8	24	6.9
Utah	212	63.1	7	2.6	2	.5	37	11.4
Nevada	84	103.4					8	9.9
Pacific	9,090	125.3	620	16.2	77	1.0	1,575	21.7
Washington	1,807	141.0	154	21.2	24	1.8	68	5.3
Oregon	965	119.7	19	4.3	3	.4	84	10.4
California	6,318	122.7	447	16.6	50	.9	1,423	27.6

[1] Without psychosis.
[2] Includes patients hospitalized at Medical Center for Federal Prisoners, Springfield, Mo.

A concise presentation of movement of patient population in State hospitals of the United States indicates certain fundamental relationships:

1. One-quarter as many patients were readmissions as were first admissions during the year.
2. The number of discharges was exceeded by patients placed on parole to the extent of 15 percent. These discharges include those direct from the hospital as well as those from parole.
3. Six percent of patients under treatment during the year were removed from the hospital books by death.
4. Patients on escape comprised approximately 2 percent of resident population.

More complete discussion of these various factors by State is offered in subsequent tables.

TABLE 11.—*Movement of patient population in State hospitals for mental disease 1938*

Resident patients	382,155
Admissions:	
First admissions	80,999
Readmissions	20,098
Transfers	7,046
Paroles	68,016
Discharges	58,950
Deaths	30 706
Patients under treatment	471,762
Patients on escape	6,791
Patients on waiting list	3,518

The proportion of resident patients who are in their first year of hospital life (table 12) may be indicative of various factors. A high percentage may signify a low hospitalization rate and great need for treatment among the unhospitalized. If facilities are inadequate, this situation will probably be coupled with a high rate of discharge. On the other hand, such a high percentage might be due to rapid expansion of facilities and a consequent influx of patients; in this case the discharge rate will not be so greatly affected.

The variation in the proportion of resident patients that are first admissions ranges from 8.8 in Colorado to 46.5 in Mississippi. The proportion in Wisconsin is higher, owing to the fact that patients in county asylums, who constitute so large a part of the whole, are not included. As would be expected, when considering regional groups the proportion is lower than average in the New England, Middle Atlantic, and East North Central regions where more complete hospitalization facilities have long been provided for all types of patients. When available facilities become more abundant, the duration of hospital life of the patient on first admission is longer. This tends to reduce the proportion of readmissions.

TABLE 12.—*Proportion of patients in their first year of hospital life in State hospitals for mental disease, 1938*

Region and State	Resident patients	First admissions		Readmissions		Total admissions	
		Number	Percent	Number	Percent	Number	Percent
United States	382,155	80,999	21.2	20,098	5.3	101,097	26.5
New England	37,119	6,763	18.2	2,344	6.3	9,107	24.5
Maine	2,681	482	18.0	124	4.6	606	22.6
New Hampshire	2,136	448	21.0	153	7.2	601	28.1
Vermont	1,073	241	22.5	105	9.8	346	32.2
Massachusetts	21,233	3,745	17.6	1,491	7.0	5,236	24.7
Rhode Island	2,699	504	18.7	115	4.3	619	22.9
Connecticut	7,297	1,343	18.4	356	4.9	1,699	23.3
Middle Atlantic	96,745	17,260	17.8	4,608	4.8	21,868	22.6
New York	70,878	12,865	18.1	3,456	4.9	16,261	22.9
New Jersey	10,451	2,278	21.8	595	5.7	2,873	27.5
Pennsylvania	15,416	2,177	14.1	557	3.6	2,734	17.7
East North Central	69,353	15,816	22.8	4,221	6.1	20,037	28.9
Ohio	17,824	3,314	18.6	532	3.0	3,846	21.6
Indiana	8,426	1,705	20.2	259	3.1	1,964	23.3
Illinois	29,468	7,318	24.8	2,351	8.0	9,669	32.8
Michigan	11,568	2,331	20.2	394	3.4	2,725	23.6
Wisconsin	2,067	1,148	55.5	685	33.1	1,833	88.7
West North Central	36,913	7,385	20.0	1,312	3.6	8,697	23.6
Minnesota	9,879	2,005	20.3	301	3.0	2,306	23.3
Iowa	6,756	1,234	18.3	324	4.8	1,558	23.1
Missouri	8,257	2,034	24.6	350	4.2	2,384	28.9
North Dakota	1,862	380	20.4	70	3.8	450	24.2
South Dakota	1,621	285	17.6	94	5.8	379	23.4
Nebraska	3,884	619	15.9	107	2.8	726	18.7
Kansas	4,654	828	17.8	66	1.4	894	19.2
South Atlantic (excluding District of Columbia)	43,043	9,744	22.6	2,055	4.8	11,799	27.4
Delaware	1,169	288	24.6	53	4.5	341	29.2
Maryland	6,481	1,033	15.9	181	2.8	1,214	18.7
Virginia	8,909	2,488	27.9	426	4.8	2,914	32.7
West Virginia	3,841	1,079	28.1	295	7.7	1,374	35.8
North Carolina	6,729	1,927	28.6	300	4.5	2,227	33.1
South Carolina	4,372	1,289	29.5	330	7.5	1,619	37.0
Georgia	7,243	984	13.6	324	4.5	1,308	18.1
Florida	4,299	656	15.3	146	3.4	802	18.7
District of Columbia	5,938	899	15.1	157	2.6	1,056	17.8
East South Central	21,055	6,094	28.9	1,446	6.9	7,540	35.8
Kentucky	6,215	1,506	24.2	351	5.6	1,857	29.9
Tennessee	5,346	1,334	25.0	410	7.7	1,744	32.6
Alabama	5,435	1,366	25.1	430	7.9	1,796	33.0
Mississippi	4,059	1,888	46.5	255	6.3	2,143	52.8
West South Central	29,451	6,681	22.7	1,753	6.0	8,434	28.6
Arkansas	4,219	1,484	35.2	359	8.5	1,843	43.7
Louisiana	5,604	1,348	24.1	195	3.5	1,543	27.5
Oklahoma	7,252	1,470	20.3	590	8.1	2,060	28.4
Texas	12,376	2,379	19.2	609	4.9	2,988	24.1
Mountain	10,262	1,823	17.8	704	6.9	2,527	24.6
Montana	1,897	365	19.2	166	8.8	531	28.0
Idaho	938	227	24.2	108	11.5	335	35.7
Wyoming	623	87	14.0	34	5.5	121	19.4
Colorado	3,731	329	8.8	186	5.0	515	13.8
New Mexico	820	188	22.9	27	3.3	215	26.2
Arizona	860	270	31.4	109	12.7	379	44.1
Utah	1,048	276	26.3	63	6.0	339	32.3
Nevada	345	81	23.5	11	3.2	92	26.7
Pacific	32,276	8,534	26.4	1,498	4.6	10,032	31.1
Washington	6,217	1,298	20.9	260	4.2	1,558	25.1
Oregon	3,896	1,019	26.2	217	5.6	1,236	31.7
California	22,163	6,217	28.1	1,021	4.6	7,238	32.7

In the State hospitals of the United States 113 patients come to take the places of each 100 patients removed by discharge or death. As shown in table 13, the result is a constantly expanding patient

population. This expansion, with few exceptions, prevails throughout the country.

The rate is high in St. Elizabeths Hospital in the District of Columbia, where a reported excess of rated capacity over patient population makes possible the accommodation of a greater number of newcomers as well as of readmitted patients. There is a greater than average excess of incoming over outgoing patients in some of the far western States. It is reasonable to suppose that those States in which the hospital system is recent as compared with the long established systems of our northeastern States will show a larger replacement rate because they are still expanding to accommodate patients not yet hospitalized.

TABLE 13.—*Replacement rate of patients in State hospitals for mental disease, 1938*

Region and State	Admissions [1]			Removals [1]			Replacement rate
	First admissions	Readmissions	Total	Discharges	Deaths	Discharges and deaths	
United States	80,923	20,098	101,021	58,950	30,706	89,656	112.7
New England	6,763	2,344	9,107	5,703	2,941	8,644	105.4
Maine	482	124	606	301	216	517	117.2
New Hampshire	448	153	601	314	172	486	123.7
Vermont	241	105	346	240	87	327	105.8
Massachusetts	3,745	1,491	5,236	3,527	1,610	5,137	101.9
Rhode Island	504	115	619	218	245	463	133.7
Connecticut	1,343	356	1,699	1,103	611	1,714	99.1
Middle Atlantic	17,260	4,608	21,868	12,872	7,647	20,519	106.6
New York	12,805	3,456	16,261	9,323	5,663	14,986	108.5
New Jersey	2,278	595	2,873	1,653	974	2,627	109.4
Pennsylvania	2,177	557	2,734	1,896	1,010	2,906	94.1
East North Central	15,816	4,221	20,037	12,904	5,632	18,536	108.1
Ohio	3,314	532	3,846	2,961	1,256	4,217	91.2
Indiana	1,705	259	1,964	909	675	1,584	124.0
Illinois	7,318	2,351	9,669	5,838	2,755	8,593	112.5
Michigan	2,331	394	2,725	1,991	746	2,737	99.6
Wisconsin	1,148	685	1,833	1,205	200	1,405	130.5
West North Central	7,385	1,312	8,697	5,124	2,650	7,774	111.9
Minnesota	2,005	301	2,306	1,477	654	2,131	108.2
Iowa	1,234	324	1,558	764	483	1,247	124.9
Missouri	2,034	350	2,384	1,422	695	2,117	112.6
North Dakota	380	70	450	260	127	387	116.3
South Dakota	285	94	379	266	104	370	102.4
Nebraska	619	107	726	385	228	613	118.4
Kansas	828	66	894	550	359	909	98.3
South Atlantic (excluding District of Columbia)	9,744	2,055	11,799	5,666	3,558	9,224	127.9
Delaware	288	53	341	217	103	320	106.6
Maryland	1,033	181	1,214	778	519	1,297	93.6
Virginia	2,488	426	2,914	1,577	878	2,455	118.7
West Virginia	1,079	295	1,374	741	418	1,159	118.6
North Carolina	1,927	300	2,227	493	550	1,043	213.5
South Carolina	1,289	330	1,619	842	397	1,239	130.7
Georgia	984	324	1,308	895	420	1,315	99.5
Florida	656	146	802	123	273	396	202.5
District of Columbia	899	157	1,056	469	281	750	140.8
East South Central	6,094	1,446	7,540	4,947	2,331	7,278	103.6
Kentucky	1,506	351	1,857	1,151	767	1,918	96.8
Tennessee	1,334	410	1,744	924	391	1,315	132.6
Alabama	1,366	430	1,796	1,656	542	2,198	81.7
Mississippi	1,888	255	2,143	1,216	631	1,847	116.0

[1] Exclusive of transfers.

TABLE 13.—*Replacement rate of patients in State hospitals for mental disease, 1938*—Continued

Region and State	Admissions			Removals			Replacement rate
	First admissions	Readmissions	Total	Discharges	Deaths	Discharges and deaths	
West South Central	6,681	1,753	8,434	5,128	2,266	7,394	114.1
Arkansas	1,484	359	1,843	1,161	474	1,635	112.7
Louisiana	1,348	195	1,543	1,032	463	1,495	103.2
Oklahoma	1,470	590	2,060	977	488	1,465	140.6
Texas	2,379	609	2,988	1,958	841	2,799	106.8
Mountain	1,823	704	2,527	1,195	778	1,973	128.1
Montana	365	166	531	279	170	449	118.3
Idaho	227	108	335	81	87	168	199.4
Wyoming	87	34	121	67	41	108	112.0
Colorado	329	186	515	306	241	547	94.1
New Mexico	188	27	215	45	63	108	199.1
Arizona	270	109	379	139	101	240	157.9
Utah	276	63	339	228	53	281	120.6
Nevada	81	11	92	50	22	72	127.8
Pacific	8,458	1,498	9,956	4,942	2,622	7,564	131.6
Washington	1,298	260	1,558	709	533	1,242	125.4
Oregon	1,019	217	1,236	639	430	1,069	115.6
California	6,141	1,021	7,162	3,594	1,659	5,253	136.3

The proportion of patient population on parole is dependent on many factors. State laws govern the length of the parole period, which may last from 1 month to 3 years before discharge from the books of the hospital. About one-third of the States maintain a 1-year period of parole, although even within a State every individual patient need not be retained on the books for an identical period. If the patient's recovery seems assured after a few months of parole, he may be discharged. Obviously this will have great effect on the proportion of patients on parole in any given State and on the validity of comparison of rates of readmission.

Another factor is the attitude of the State or individual hospital in this regard. The availability of social workers to follow paroled patients influences the numbers; hospital physicians are readier to give parole if they can send such a person to visit and advise the paroled patient.

In the United States as a whole the proportion of patients on parole is 17.8 percent. Among the individual States it varies from a minimum of 0.6 percent in South Dakota to a maximum of 47.7 percent in Virginia. In Wisconsin the proportion, 47.9 in State hospitals, although actually the highest among the States, is incomplete because most continued-treatment patients are cared for in county hospitals and their condition does not lend itself so readily to parole.

In the South Atlantic and East South Central regions the high proportions are probably due to a lack of hospitalization facilities which necessitates placing patients on parole as soon as there is a reasonable possibility of adjustment to community life, in order that beds may be provided for new patients in acute need of care.

The proportion of patients on escape averages 1.8 percent in the country as a whole. Individual variation among the States ranges from 0 to 4 percent. This variation appears not to be dependent upon the quality of hospital care afforded, since the variation is indiscriminate. These data are given in table 14.

TABLE 14.—*Patients on parole and on escape in State hospitals for mental disease, 1938*

Region and State	Resident patients	Paroles		Patients on escape	
		Number	Percent	Number	Percent
United States	382,155	68,016	17.8	6,791	1.8
New England	37,119	4,987	13.4	492	1.3
Maine	2,681	332	12.4	7	.3
New Hampshire	2,136	246	11.5	65	3.0
Vermont	1,073	15	1.4	2	.2
Massachusetts	21,233	2,469	11.6	326	1.5
Rhode Island	2,699	230	8.5	20	.7
Connecticut	7,297	1,695	23.2	72	1.0
Middle Atlantic	96,745	14,710	15.2	767	.8
New York	70,878	9,730	13.7	378	.5
New Jersey	10,451	671	6.4	160	1.5
Pennsylvania	15,416	4,309	28.0	229	1.5
East North Central	69,353	14,288	20.6	1,389	2.0
Ohio	17,824	5,825	32.7	430	2.4
Indiana	8,426	595	7.1	56	.7
Illinois	29,468	4,929	16.7	751	2.5
Michigan	11,568	1,948	16.8	141	1.2
Wisconsin	2,067	991	47.9	11	.5
West North Central	36,913	5,861	15.9	857	2.3
Minnesota	9,879	1,588	16.1	334	3.4
Iowa	6,756	[1] 1,398	20.7	[1] 116	1.7
Missouri	8,257	1,346	16.3	139	1.7
North Dakota	1,862	238	12.8	75	4.0
South Dakota	1,621	9	.6	29	1.8
Nebraska	3,884	408	10.5	68	1.8
Kansas	4,654	874	18.8	96	2.1
South Atlantic (excluding District of Columbia)	43,043	11,054	25.7	974	2.3
Delaware	1,169	253	21.6	21	1.8
Maryland	6,481	1,243	19.2	84	1.3
Virginia	8,909	[1] 4,225	47.4	[1] 428	4.8
West Virginia	3,841	355	9.2	75	2.0
North Carolina	6,729	2,166	32.2	72	1.1
South Carolina	4,372	991	22.7	88	2.0
Georgia	7,243	1,361	18.8	179	2.5
Florida	4,299	460	10.7	27	.6
District of Columbia	5,938	243	4.1	123	2.1
East South Central	21,055	5,414	25.7	163	.8
Kentucky	6,215	1,367	22.0	47	.8
Tennessee	5,346	424	7.9	86	1.6
Alabama	5,435	1,614	29.7	30	.6
Mississippi	4,059	2,009	49.5		
West South Central	29,451	5,667	19.2	866	2.9
Arkansas	4,219	1,050	24.9	290	6.9
Louisiana	5,604	944	16.8	117	2.1
Oklahoma	7,252	1,364	18.8	244	3.4
Texas	12,376	2,309	18.7	215	1.7
Mountain	10,262	1,070	10.4	231	2.3
Montana	1,897	35	1.8	52	2.7
Idaho	938	195	20.8	57	6.1
Wyoming	623	25	4.0	3	.5
Colorado	3,731	325	8.7	67	1.8
New Mexico	820	109	13.3	8	1.0
Arizona	860	193	22.4	26	3.0
Utah	1,048	158	15.1	14	1.3
Nevada	345	30	8.7	4	1.2
Pacific	32,276	4,722	14.6	929	2.9
Washington	6,217	794	12.8	107	1.7
Oregon	3,896	762	19.6	141	3.6
California	22,163	3,166	14.3	681	3.1

[1] One hospital not reported.

Thirteen of every 100 patients under treatment in State hospitals in the United States in 1938 were discharged during the year. For every 59 patients discharged, 100 were admitted. The discharged patients were not necessarily admissions during the same year but may have been admitted previously. The rates computed on both bases show consistent variation, as shown in table 15.

The death rate per 1,000 under treatment is 65, half of the discharge rate. The rates among the States show considerable variation and cannot be adequately interpreted without knowledge of the type of patient hospitalized. Generally speaking, those States in which the proportion of old patients is large will have a higher death rate. The death rate is also high for general paresis, and for psychoses with brain tumor, with Huntington's chorea, and with other somatic diseases.

TABLE 15.—*Discharge and death rates per 1,000 under treatment and per 100 admissions in State hospitals for mental disease, 1938*

Region and State	Patients under treatment	Admissions	Discharge rate		Death rate	
			Per 1,000 under treatment	Per 100 admissions	Per 1,000 under treatment	Per 100 admissions
United States	471,762	101,021	125.0	58.4	65.1	30.4
New England	45,763	9,107	124.6	62.6	64.3	32.3
Maine	3,198	606	94.1	49.7	67.5	35.6
New Hampshire	2,622	601	119.8	52.2	65.6	28.6
Vermont	1,400	346	171.4	69.4	62.1	25.1
Massachusetts	26,370	5,236	133.8	67.4	61.1	30.7
Rhode Island	3,162	619	668.9	35.2	77.5	39.6
Connecticut	9,011	1,699	122.4	64.9	67.8	36.0
Middle Atlantic	117,264	21,868	109.8	58.9	65.2	35.0
New York	85,864	16,261	108.6	57.3	66.0	34.8
New Jersey	13,078	2,873	126.4	57.5	74.5	33.9
Pennsylvania	18,322	2,734	103.5	69.3	55.1	36.9
East North Central	88,443	20,037	145.9	64.4	63.7	28.1
Ohio	22,041	3,846	134.3	77.0	57.0	32.7
Indiana	10,010	1,964	90.8	46.3	67.4	34.4
Illinois	38,061	9,669	153.4	60.4	72.4	28.5
Michigan	14,859	2,725	134.0	73.1	50.2	27.4
Wisconsin	3,472	1,833	347.1	65.7	57.6	10.9
West North Central	44,687	8,697	114.7	58.9	59.3	30.5
Minnesota	12,010	2,306	123.0	64.1	54.5	28.4
Iowa	8,003	1,558	95.5	49.0	60.4	31.0
Missouri	10,374	2,384	137.1	59.6	67.0	29.2
North Dakota	2,249	450	115.6	57.8	56.5	28.2
South Dakota	1,991	379	133.6	70.2	52.2	27.4
Nebraska	4,497	726	85.6	53.0	50.7	31.4
Kansas	5,563	894	98.9	61.5	64.5	40.2
South Atlantic (excluding District of Columbia)	52,267	11,799	108.4	48.0	68.1	30.2
Delaware	1,489	341	145.7	63.6	69.2	30.2
Maryland	7,778	1,214	100.0	64.1	66.7	42.8
Virginia	11,364	2,914	138.8	54.1	77.3	30.1
West Virginia	5,000	1,374	148.2	53.9	83.6	30.4
North Carolina	7,772	2,227	63.4	22.1	70.8	24.7
South Carolina	5,611	1,619	150.1	52.0	70.8	24.5
Georgia	8,558	1,308	104.6	68.4	49.1	32.1
Florida	4,695	802	26.2	15.3	58.1	34.0
District of Columbia	6,688	1,056	70.1	44.4	42.0	26.6
East South Central	28,333	7,540	174.6	65.6	82.3	30.9
Kentucky	8,133	1,857	141.5	62.0	94.3	41.3
Tennessee	6,661	1,744	138.7	53.0	58.7	22.4
Alabama	7,633	1,796	217.0	92.2	71.0	30.2
Mississippi	5,906	2,143	205.9	56.7	82.7	29.4

TABLE 15.—*Discharge and death rates per 1,000 under treatment and per 100 admissions in State hospitals for mental disease, 1938*—Continued

Region and State	Patients under treatment	Admissions	Discharge rate		Death rate	
			Per 1,000 under treatment	Per 100 admissions	Per 1,000 under treatment	Per 100 admissions
West South Central	36,845	8,434	139.2	60.8	61.5	26.9
Arkansas	5,854	1,843	198.3	63.0	81.0	25.7
Louisiana	7,099	1,543	145.4	66.9	65.2	30.0
Oklahoma	8,717	2,060	112.1	47.4	56.0	23.7
Texas	15,175	2,988	129.0	65.5	55.4	28.1
Mountain	12,235	2,527	97.7	47.3	63.6	30.8
Montana	2,346	531	118.9	52.5	72.5	32.0
Idaho	1,106	335	73.2	24.2	78.7	26.0
Wyoming	731	121	91.7	55.4	56.1	33.9
Colorado	4,278	515	71.5	59.4	56.3	46.8
New Mexico	928	215	48.5	20.9	67.9	29.3
Arizona	1,100	379	126.4	36.7	91.8	26.6
Nevada	417	92	119.9	54.3	52.8	23.9
Utah	1,329	339	171.6	67.3	39.9	15.6
Pacific	39,791	9,956	124.2	49.6	65.9	26.3
Washington	7,459	1,558	95.1	45.5	71.5	34.2
Oregon	4,965	1,236	128.7	51.7	86.6	34.8
California	27,367	7,162	131.3	50.2	60.6	23.2

XII. Medical Staff

Proper treatment in a mental hospital requires measures of most varying types. The patient's removal from the environment in which his illness developed is a part of his treatment. As soon as the patient enters the hospital, multiple helpful influences are brought to bear on his problems. Many of these influences are exercised by others than physicians and need only direction from the medical staff. Others are directly the work of the physicians. Since patients have many incidental ills, all branches of medicine and surgery make their contribution. Most of all there is need of the play of well mind upon sick mind; the physicians in mental hospitals not only must understand diagnosis thoroughly but should also maintain the best practice of individual psychotherapy.

It should be remembered that in a large number of public mental hospitals the medical staff is so small and its time so occupied with administrative matters, with attention to the physical needs of the patient and with making brief routine observations, that psychotherapy, which in the very nature of things should be one of the most important forms of treatment in the hospital, is seriously neglected.

There is no known limit to the quota of physicians who, if intelligent and earnest, could aid in the treatment of the patients in a large mental hospital, but since available funds limit the number of those who can

be employed, some practical standard has been sought. Basing its findings upon widespread experience, the American Psychiatric Association declared that a hospital serving its community in the various ways expected of it should have an average of not less than one assistant physician to every 150 patients. This ratio therefore stands as a rough measure of numerical adequacy. It leaves out of account the superintendent, whose duties are largely administrative. It includes all other medical officers, even though some of them also have administrative responsibilities, or are specialists outside the clinical service, such as the pathologist. Efforts have been made in some circles, as for instance in the Massachusetts State service, to devise a scheme that would be more detailed and specific. When such a scheme has been interpreted it may show a ratio not greatly different from that of the American Psychiatric Association. There is so much psychiatric work to be done that few hospitals keep specialists in other fields on their resident staff. This is done in institutions where the treatment of the incidental ailment is considered the main responsibility, in some that are far from medical centers, and in some with an unusually active service.

As shown in table 16, the ratio of patients to assistant physicians in State hospitals of the United States is 248.0. The number of assistant physicians utilized for this purpose excludes superintendents, but includes internes. Internes have been listed apart from other assistant physicians in table 16 in order that the figures might be separately determined if so desired. In cases where a staff physician is regularly employed for part-time service, such time has been counted as one-half, unless a more precise figure was supplied.

The ratio in the country as a whole is two-thirds higher than the standard ratio adopted by the American Psychiatric Association in 1926. There are few State hospitals that have been able to achieve this ratio. Those that have are worthy of mention. They are: St. Elizabeths Hospital, District of Columbia; Delaware State Hospital, Farnhurst; Norfolk State Hospital, Nebraska; Brooklyn State Hospital, New York, and Utica State Hospital, New York.

The patient-assistant physician ratio ranges among the States from 114.3 in Delaware to 696.6 in Kentucky, the latter ratio being more than four times the accepted standard.

The Northeastern and North Central regions of the country show, on the whole, the lower ratios while the greater excess loads are in the Southern and Mountain States.

TABLE 16.—*Ratio of patients to assistant physicians in State hospitals for mental disease, 1938*

Region and State	Average daily patient population	Total physicians	Superintendents	Assistant physicians (excluding internes)	Internes	Total assistant physicians	Ratio of patients to assistant physicians	Excess ratio	
								Number	Percent
United States	376,787	1,689	170	1,391	128	1,519	248.0	98.0	65.3
New England	36,698	196	20	175	1	176	208.5	58.5	39.0
Maine	2,633	10	2	8		8	329.1	179.1	119.4
New Hampshire	2,091	11	1	10		10	209.1	59.1	39.4
Vermont	1,054	5	1	4		4	263.5	113.5	75.7
Massachusetts	21,098	119	12	107		107	197.2	47.2	31.5
Rhode Island	2,617	13	1	12		12	218.1	68.1	45.4
Connecticut	7,205	38	3	34	1	35	205.9	55.9	37.3
Middle Atlantic	95,439	550	31	429	90	519	183.9	33.9	22.6
New York	69,823	404	20	294	90	384	181.8	31.8	21.2
New Jersey	10,405	66	3	63		63	165.2	15.2	10.1
Pennsylvania	15,211	80	8	72		72	211.3	61.3	40.9
East North Central	68,675	287	32	251	4	255	269.3	119.3	79.5
Ohio	18,287	56	8	48		48	381.0	231.0	154.0
Indiana	8,183	34	5	29		29	282.2	132.2	88.1
Illinois	28,876	139	10	126	3	129	223.8	73.8	49.2
Michigan	11,228	43	6	36	1	37	303.5	153.5	102.3
Wisconsin	2,101	15	3	12		12	175.1	25.1	16.7
West North Central	36,619	145	23	119	3	122	300.2	150.2	100.1
Minnesota	10,003	29	7	22		22	454.7	304.7	203.1
Iowa	6,609	23	4	19		19	347.8	197.8	131.9
Missouri	8,061	34	4	28	2	30	268.7	118.7	79.1
North Dakota	1,818	8	1	6	1	7	259.7	109.7	73.1
South Dakota	1,623	7	1	6		6	270.5	120.5	80.3
Nebraska	3,849	21	3	18		18	213.8	63.8	42.5
Kansas	4,656	23	3	20		20	232.8	82.8	55.2
South Atlantic (excluding District of Columbia)	41,803	161	19	138	4	142	294.4	144.4	96.3
Delaware	1,143	11	1	9	1	10	114.3	−35.7	−23.8
Maryland	6,325	37	4	33		33	191.7	41.7	27.8
Virginia	8,795	23	4	17	2	19	462.9	312.9	208.6
West Virginia	3,468	16	4	12		12	289.0	139.0	92.7
North Carolina	6,511	20	3	16	1	17	383.0	233.0	155.3
South Carolina	4,171	17	1	16		16	260.7	110.7	73.8
Georgia	7,187	22	1	21		21	342.2	192.2	128.1
Florida	4,203	15	1	14		14	300.2	150.2	100.1
District of Columbia	5,810	49	1	30	18	48	121.0	−29.0	−19.3
East South Central	20,940	56	9	43	4	47	445.5	295.5	197.0
Kentucky	6,269	12	3	9		9	696.6	546.6	364.4
Tennessee	5,213	14	3	7	4	11	473.9	323.9	215.9
Alabama	5,423	12	1	11		11	493.0	343.0	228.7
Mississippi	4,035	18	2	16		16	252.2	102.2	68.1
West South Central	28,888	93	13	80		80	361.1	211.1	140.7
Arkansas	4,107	13	2	11		11	373.4	223.4	148.9
Louisiana	5,548	15	2	13		13	426.8	276.8	184.5
Oklahoma	7,172	22	4	18		18	398.4	248.4	165.6
Texas	12,061	43	5	38		38	317.4	167.4	111.6
Mountain	10,176	36	9	26	1	27	376.9	226.9	151.3
Montana	1,897	5	1	4		4	473.3	323.3	215.5
Idaho	934	4	2	2		2	467.0	317.0	211.3
Wyoming	557	2	1	1		1	557.0	407.0	271.3
Colorado	3,650	12	1	11		11	331.8	181.8	121.2
New Mexico	789	3	1	2		2	394.5	244.5	163.0
Arizona	860	4	1	3		3	286.7	136.7	91.1
Utah	1,123	4	1	2	1	3	374.3	74.3	49.5
Nevada	366	2	1	1		1	366.0	216.0	144.0
Pacific	31,739	116	13	100	3	103	308.1	158.1	105.4
Washington	6,096	29	3	26		26	234.5	84.5	56.3
Oregon	3,918	15	2	13		13	301.4	151.4	100.9
California	21,725	72	8	61	3	64	339.5	189.5	126.3

Most mental hospitals have a consulting staff. Some of these specialists might more properly be called "attending" physicians since

they come at stated intervals and perhaps see all new patients as well as others that may be referred. All the branches of medicine may be represented. Occasionally (e. g., at Longview State Hospital, Cincinnati, Ohio) the medical staff is organized along lines recommended for general hospitals. Recognition of their services in other institutions varies with the circumstances.

The resident staff of a well-organized hospital is likely to embrace a variety of talent and no little range of special medical knowledge and interest. Every hospital worthy of the name is a training center for the younger members of the staff, and under the guidance of the superintendent or someone designated by him the new physician studies his new specialty, psychiatry, at the same time that he is applying the general medical knowledge that he has already mastered.

There is a wide range of standards for appointment to the higher grades in hospital service. In the larger and better organized State services promotion comes only after considerable experience. Certification by the American Board of Psychiatry and Neurology is often spoken of as a desirable qualification in the higher grades, and is required by law for the Commissioner and Assistant Commissioner of Mental Health in Massachusetts.

There are many hospitals in which promotion is expected to depend on a combination of ability and length of service. Competitive examinations are held for higher grades in the New York State service, St. Elizabeths Hospital at Washington, and some others. Noncompetitive qualifying examinations cover one of the earlier promotions in the New York State service, and in each hospital there is permitted the number of increased salaries necessary as its juniors become eligible to be seniors. In many State organizations promotion is likely to be confined to the one hospital in which the physician started his service.

There are, unfortunately, other districts in which no definite standard prevails. A superintendent may be chosen because of experience in general medicine or in public administration rather than psychiatry. Promotion in such an organization may have little relation to experience or aptitude. Such hospitals are only too likely to be controlled at times by political rather than medical forces.

The grade of resident in psychiatry has not been so well delimited nor its activities so well organized as is the case in several other types of special hospitals. The American Medical Association has thrown its powerful influence in this direction for some years. More recently the desire to gain recognition as a specialist from the American Board of Psychiatry and Neurology has been another incentive for the young psychiatrist to align himself with a hospital where his experience will be supplemented by the best training. This creates an additional demand for postgraduate education and applies a quiet pressure to

institutions that have not been prompt in organizing their medical work to this end.

XIII. Nonmedical Personnel

American institutions for the mentally sick are usually at least as large as villages and some are as large as cities. A very broad range of work must be done to maintain these establishments; and special work of high quality is necessary for the various types of treatment that are needed by these hundreds of patients. The ratio of personnel to patients is not so high as in a general hospital where patients are mostly in bed and all labor must be hired. This reflects in part the ability of many of the patients to care for themselves; it reflects still further the capacity of a large number of the patients to be helpful to others by manning the hospital industries and by assisting the nursing personnel about the wards and in the dining rooms and other places where unskilled or moderately skilled labor is needed to supplement that of the trained personnel.

Personal service to patients is given by employees with many types of training, and organized in various ways. These employees are grouped under the title "the nursing personnel." It is obvious that the work of the nursing personnel embraces duties that only occasionally fall to the nurses of the general hospital. It has even been claimed that a psychiatric nurse should have all the training and ability of a general nurse and much additional psychiatric instruction and training. The two terms most generally applied to employees who live and work day by day with the patients are "nurse" and "attendant."

Graduate nurses in mental hospitals represent several types of training. There are graduates of general hospital schools who have pushed on into psychiatric nursing either through taking a postgraduate course or by learning through experience in the mental hospital, or without ever actually learning to carry properly the responsibilities of their work. There are graduates of mental hospital schools of nursing who in three years have acquired a good knowledge of general nursing and a special knowledge of mental nursing that makes them of prime value to their organizations. There are some graduates of 2-year courses who for various reasons have not added work in other schools to fit themselves for registration under the present requirements of boards of licensure.

Most graduate nurses are women. A graduate male nurse is likely to be much sought after and can therefore be sure of steady employment as long as he is useful, but the youth of America do not turn to this work in any considerable numbers. Moreover the schools that accept young men as students are relatively few. Native aptitude rather than training has been the basis of promotion for the largest number of men who have progressed above the first grade in the care of

mental patients. The same may be said of a large number of women, but their proportion is not so high as among the men since more women graduate nurses are available.

Attendants are recruited from many sources, depending on the current state of employment. A hospital has its greatest success and its most lamentable failures because of the character and organization of these employees. Most superintendents give preference, if they can, to candidates from the country. Those who have lived on the soil and understand the lower animals are less likely to be unjust in their expectations of the strength and responsiveness of the sick human being. In many hospitals the overturn among such employees is lamentable, and at times scandalous. This is largely an economic matter. The wages paid are not high, ordinarily from $35 to $55 a month with maintenance. There is a reasonable expectation of increases; in a few States increase of pay for length of service is automatic. The poorer States have no such system. Besides the increases available for length of service, promotions are possible when someone drops out ahead. Hours of duty have been as long as 16, if an evening entertainment for patients happened to follow a long full day. These hours have been much shortened during the last two decades, in consonance with the general tendency in industry to lessen the period of consecutive activity. A considerable number of States now expect only an 8-hour day, but some require 12.

Responsibility for the entire nursing service may be carried by the superintendent or principal of nurses, who is usually a woman. She will then have an assistant of each sex through whom the lines of authority pass. Many institutions, however, have independent services for men and women. This grows out of the fact that fewer men have had the professional training that enables them to register; in order to avoid the friction that might develop between registered young women and older experienced men, the male service therefore continues its separate existence.

Customarily, for ready comparison, patient ratios are computed on the basis of the entire nursing staff, graduate nurses plus attendants.

As shown in table 17 the ratio of patients to nurses and attendants is 9.3 in State hospitals. This is 16.3 percent in excess of the standard of the American Psychiatric Association. The standard adopted in 1926 advocates, as a maximum, 8 patients per nurse and attendant. This ratio was adopted for personnel on a 2-shift, 12-hour basis. Among those States whose nursing personnel operates on this schedule the ratios range from 5.5 in Delaware to 19.7 in Tennessee.

Some States have adopted a shorter period of duty for nursing personnel and operate on a 3-shift basis. They are: Illinois, Indiana, Massachusetts, Michigan, New Jersey, New York, Texas (female

personnel), Washington, and Wisconsin (State hospitals). These ratios should, of course, be lower than for personnel operating on two shifts. They range from 6.3 in New York to 12.9 in Indiana. In the District of Columbia the ratio is 5.1 patients per nurse and attendant.

Among the nine geographic regions of the country, only two, the New England and Middle Atlantic, have improved upon the standard. Their respective ratios are 7.2 and 6.8. The East South Central region (comprising the States of Kentucky, Tennessee, Alabama, and Mississippi), with a ratio of 15.2, exceeds the standard by 90 percent.

In the United States 45 State hospitals have attained a ratio of 8 patients per nurse and attendant or better. These hospitals comprise 26 percent of the hospitals in the entire country. Their patient population is 122,339, or 32.5 percent of all patients in State hospitals.

These hospitals are:

Connecticut:
- Connecticut State Hospital.
- Norwich State Hospital.

Delaware:
- Delaware State Hospital.

District of Columbia:
- St. Elizabeths Hospital.

Illinois:
- Manteno State Hospital.

Massachusetts:
- Boston State Hospital.
- Bridgewater State Hospital.
- Danvers State Hospital.
- Foxboro State Hospital.
- Gardner State Hospital.
- Grafton State Hospital.
- Medfield State Hospital.
- Metropolitan State Hospital.
- Northampton State Hospital.
- Taunton State Hospital.
- Westborough State Hsopital.
- Worcester State Hospital.

Michigan:
- Kalamazoo State Hospital.
- Newberry State Hospital.
- Ypsilanti State Hospital.

Minnesota:
- Hastings State Hospital.
- Moose Lake State Hospital.

New Hampshire:
- New Hampshire State Hospital.

New Jersey:
- New Jersey State Hospital, Trenton.

New York:
- Binghamton State Hospital.
- Brooklyn State Hospital.
- Buffalo State Hospital.
- Central Islip State Hospital.
- Creedmoor State Hospital.
- Dannemora State Hospital.
- Gowanda State Hospital.
- Harlem Valley State Hospital.
- Hudson River State Hospital.
- Kings Park State Hospital.
- Manhattan State Hospital.
- Marcy State Hospital.
- Matteawan State Hospital.
- Middletown State Hospital.
- Pilgrim State Hospital.
- Rochester State Hospital.
- Rockland State Hospital.
- St. Lawrence State Hospital.
- Utica State Hospital.
- Willard State Hospital.

Pennsylvania:
- Danville State Hospital.
- Torrance State Hospital.

Wisconsin:
- Mendota State Hospital.
- Winnebago State Hospital.

Generally speaking, those hospitals which maintain an adequate nursing ratio also employ a large proportion of graduate nurses. This would indicate better nursing care from both a quantitative and a qualitative viewpoint for a small proportion of fortunately situated mental patients.

In the country as a whole the percentage of graduate nurses is 10.1. Sixteen States have proportions higher than this. Those States whose proportions are lowest are: Alabama, California, Indiana, Kentucky, Oklahoma, and Utah. In each of the latter States graduate nurses constitute less than 2 percent of all nursing personnel.

TABLE 17.—*Ratio of patients to nurses and attendants in State hospitals for mental disease, 1938*

Region and State	Average daily patient population	Nurses and attendants	Ratio of patients to nurses and attendants	Excess ratio		Graduate nurses	
				Number	Percent	Number	Percent
United States	376,787	40,344½	9.3	1.3	16.3	4,063	10.1
New England	36,698	5,068	7.2	−.8	−10.0	702	13.9
Maine	2,633	277	9.5	1.5	18.8	33	11.9
New Hampshire	2,091	318	6.6	−1.4	−17.5	45	14.2
Vermont	1,054	118	8.9	.9	11.3	20	16.9
Massachusetts	21,098	3,026	7.0	−1.0	−12.5	471	15.6
Rhode Island	2,617	314	8.3	.3	3.8	33	10.5
Connecticut	7,205	1,015	7.1	−.9	−11.3	100	9.9
Middle Atlantic	95,439	13,992	6.8	−1.2	−15.0	1,874	13.4
New York	69,823	11,152	6.3	−1.7	−21.3	1,410	12.6
New Jersey	10,405	1,234	8.4	.4	5.0	160	13.0
Pennsylvania	15,211	1,606	9.5	1.5	18.8	304	18.9
East North Central	68,675	6,491	10.6	2.6	32.5	569	8.9
Ohio	18,287	1,177	15.5	7.5	93.8	210	17.8
Indiana	8,183	634	12.9	4.9	61.3	6	1.0
Illinois	28,876	3,012	9.6	1.6	20.0	240	8.0
Michigan	11,228	1,331	8.4	.4	5.0	90	6.8
Wisconsin	2,101	337	6.2	−1.8	−22.5	23	6.8
West North Central	36,619	2,787	13.1	5.1	63.8	323	11.6
Minnesota	10,003	719	13.9	5.9	73.8	142	19.7
Iowa	6,609	404	16.4	8.4	105.0	49	12.1
Missouri	8,061	664	12.1	4.1	51.3	35	5.3
North Dakota	1,818	188	9.7	1.7	21.3	15	8.0
South Dakota	1,623	127	12.8	4.8	60.0	4	3.1
Nebraska	3,849	350	11.0	3.0	37.5	29	8.3
Kansas	4,656	335	13.9	5.9	73.8	49	14.6
South Atlantic (excluding District of Columbia)	41,803	3,428	12.2	4.2	52.5	225	6.6
Delaware	1,143	206	5.5	−2.5	−31.3	21	10.2
Maryland	6,325	622	10.2	2.2	27.5	29	4.7
Virginia	8,795	534	16.5	8.5	106.3	39	7.3
West Virginia	3,468	213	16.3	8.3	103.8	22	10.3
North Carolina	6,511	454	14.3	6.3	78.8	31	6.8
South Carolina	4,171	410	10.2	2.2	27.5	42	10.2
Georgia	7,187	633	11.4	3.4	42.5	22	3.5
Florida	4,203	356	11.8	3.8	47.5	19	5.3
District of Columbia	5,810	1,148	5.1	−2.9	−36.3	98	8.5
East South Central	20,940	1,381	15.2	7.2	90.0	39	2.8
Kentucky	6,269	369	17.0	9.0	112.5	6	1.6
Tennessee	5,213	264	19.7	11.7	146.3	8	3.0
Alabama	5,423	415	13.1	5.1	63.8	8	1.9
Mississippi	4,035	333	12.1	4.1	51.3	17	5.1
West South Central	28,888	2,375	12.2	4.2	52.5	72	3.0
Arkansas	4,107	306	13.4	5.4	67.5	7	2.3
Louisiana	5,548	522	10.6	2.6	32.5	15	2.9
Oklahoma	7,172	582	12.3	4.3	53.8	10	1.7
Texas	12,061	965	12.5	4.5	56.3	40	4.1
Mountain	10,176	982	10.4	2.4	30.0	65	6.6
Montana	1,897	104	18.2	9.7	121.3	7	6.7
Idaho	934	56	16.7	8.7	108.8	6	10.7
Wyoming	557	42	13.3	5.3	66.3	12	28.6
Colorado	3,650	447	8.2	.2	2.5	26	5.8
New Mexico	789	100	7.9	−.1	−1.3	8	8.0
Arizona	860	89	9.7	1.7	21.3	3	3.4
Utah	1,123	107	10.5	2.5	31.3	2	1.9
Nevada	366	37	9.9	1.9	23.8	1	2.7
Pacific	31,739	2,692½	11.8	3.8	47.5	96	3.6
Washington	6,096	561	10.9	2.9	36.3	70	12.5
Oregon	3,918	228	17.2	9.2	115.0	9	3.9
California	21,725	1,903½	11.4	3.4	42.5	17	.9

Certain other types of personnel are of special importance since they carry on active treatment under the orders of the medical staff. An attempt to classify them in definite groups may be unsatisfactory because hospitals use different titles for similar functions and also distribute such activities along different lines. These activities range from physical treatment by means of massage through a considerable range to the emotional influences of such activities as the study of books and conducting musical ensembles. In some places, as for instance the New York State service, all such activities are grouped under the term "occupational therapy" and the head occupational therapist is technically responsible for the activities of workers in several scattered fields. Other hospitals perhaps divide physical education from occupational therapy, or the recreational director may also give massage; and many other combinations of duties are found. Hence the nomenclature of this report may easily differ from that to which the reader is accustomed, because the report tries to define the numbers engaged in certain activities rather than to present an administrative scheme. In table 18 the special therapists are grouped together.

The ratio of patients to all employees may be 3.6 in a well-staffed hospital. In a poorly organized institution it may be 11.3. One may anticipate that other employees will number from two-thirds to one and one-half times the nursing personnel.

Still another type of employee has quite different responsibilities in different hospitals. These are the social workers. They were brought into the mental hospital organization to supervise and aid the patient who was out on visit. Then they were utilized in the out-patient clinic. Their histories of patients are so valuable that in some organizations they have superseded the physicians as historians. In many places the social worker has still other duties inside the hospital. She becomes acquainted with the new patient soon after his admission and learns from him much about his family and background. She sees him before he leaves the hospital, and in doubtful cases tries to make his home more competent to receive him and to reestablish him in society. In some hospitals she is expected to develop acquaintance with those patients whose recovery or improvement is expected within a few months. In one hospital it is her responsibility to explain to the new patient the social and legal phases of his removal from home.

There are no numerical standards by which we may gauge the adequacy of personnel other than medical and nursing. The range of patient load for dietitian, laboratory technician, occupational therapist, pharmacist, social worker, and X-ray technician is wide. Nor does each hospital maintain an employee for all these types of work. Because of inability to secure information from each hospital

regarding personnel the data are reported only for those hospitals giving definite response. Probably, in most cases, a failure to reply was indicative of the absence of an employee in that field.

Table 18 includes 128 hospitals for dietitians, 142 for laboratory technicians, etc., the total at the end of each column indicating the number of hospitals reporting. The stub of the table designates the patient ratio per employee and the numbers beneath each type of personnel are the numbers of hospitals in which a ratio within that range obtains. It should be noted that the ranges have been made of unequal size in order to show a finer distribution of hospitals where ratios are better.

For each type of personnel the median patient ratio has been computed. These positions have not been presented concurrently to draw comparison one with the other. Their duties are not parallel. The median ratios differ widely.

More hospitals report the employment of occupational therapists and the median patient ratio, 562.5, is less than for other personnel.

Social workers are reported as employed in 116 hospitals and the median ratio is 1,189.5.

Dietitians are reported in 128 hospitals and the median patient ratio is 1,608.7.

More hospitals employ laboratory technicians than X-ray technicians but the patient ratio in the former case is lower.

TABLE 18.—*Ratio of patients to other personnel in State hospitals for mental disease, 1938*

Patient ratio per employee	Dietitians	Laboratory technicians	Occupational therapists	Pharmacists	Social workers	X-ray technicians
0–499	3	4	69	1	12	4
500–999	27	23	32	5	35	6
1,000–1,499	29	31	17	12	29	9
1,500–1,999	23	27	12	29	19	18
2,000–2,499	21	19	5	29	5	25
2,500–2,999	12	10	2	16	6	18
3,000–3,999	8	17	4	20	8	20
4,000–4,999	3	5	4	8	1	11
5,000 and over	2	6	1	6	1	11
Total	128	142	146	126	116	122
Median	1,608.7	1,740.7	562.5	2,275.9	1,189.5	2,480.0

The ratio of patient population to dentists has been given separately because part-time personnel play so large a part.

Some institutions with an inadequate medical staff nevertheless provide satisfactory dental treatment. No standards of comparison have been derived for the ratio of patient population to dentist. It is obvious that such an index cannot be stringently compared without adequate knowledge of the needs of the patients being cared for. In the absence of information concerning the number of treatments given or of the number of patients treated, the total patient load per dentist

must perforce be employed. In some States there is no dentist on the staff of the hospitals, in others a part-time employee cares for the needs of the patients.

In table 19 the number of full-time and part-time dentists in each State has been indicated. The patient ratio was computed by adding to the number of full-time employees that fraction which the part-time dentists were reported to devote to their duties. When the amount of time was not indicated, it was assumed that they were employed on a half-time basis.

The patient ratio ranges, in those States employing dentists, from 371.3 in Wyoming to 4,171 in South Carolina. In St. Elizabeths Hospital in the District of Columbia the patient load is 5,810, only one dentist being employed, but dental internes assist. The regional load is lowest in the Mountain States and highest in the Pacific region.

TABLE 19.—*Ratio of patients to dentists in State hospitals for mental disease, 1938*

Region and State	Average daily patient population	Dentists		Patient ratio
		Full-time	Part-time	
United States	376,787	150	63	2,078.8
New England	36,698	17	3	1,983.7
Maine	2,633	1	1	1,755.3
New Hampshire	2,091	1		2,091.0
Vermont	1,054		1	2,108.0
Massachusetts	21,098	12		1,758.2
Rhode Island	2,617	1		2,617.0
Connecticut	7,205	2	1	2,882.0
Middle Atlantic	95,439	41	11	2,052.5
New York	69,823	29	2	2,327.4
New Jersey	10,405	8		1,300.6
Pennsylvania	15,211	4	9	1,789.5
East North Central	68,675	25	13	2,180.2
Ohio	18,287	4	5	2,813.4
Indiana	8,183	3	3	1,818.4
Illinois	28,876	12	1	2,310.1
Michigan	11,228	5	2	1,871.3
Wisconsin	2,101	1	2	1,050.5
West North Central	36,619	16	10	1,743.8
Minnesota	10,003	3	4	2,000.6
Iowa	6,609	4		1,652.3
Missouri	8,061	2	4	2,015.3
North Dakota	1,818	1		1,818.0
South Dakota	1,623	2		811.5
Nebraska	3,849	2	1	1,539.6
Kansas	4,656	2	1	1,862.4
South Atlantic (excluding District of Columbia)	41,803	17	9	1,967.2
Delaware	1,143	1	1	762.0
Maryland	6,325	2	3	1,807.1
Virginia	8,795	3	1	2,706.2
West Virginia	3,468	1	3	1,387.2
North Carolina	6,511	2	1	2,604.4
South Carolina	4,171	1		4,171.0
Georgia	7,187	3		2,395.7
Florida	4,203	4		1,050.8
District of Columbia	5,810	1		5,810.0
East South Central	20,940	8	2	2,326.7
Kentucky	6,269	2	1	2,507.6
Tennessee	5,213	3		1,737.7
Alabama	5,423	2		2,711.5
Mississippi	4,035	1	1	2,690.0

TABLE 19.—*Ratio of patients to dentists in State hospitals for mental disease, 1938*—Continued

Region and State	Average daily patient population	Dentists		Patient ratio
		Full-time	Part-time	
West South Central	28,888	10	6	2,222.2
Arkansas	4,107	2		2,053.5
Louisiana	5,548	2	3	1,585.1
Oklahoma	7,172	1	3	2,868.8
Texas	12,061	5		2,412.2
Mountain	10,176	3	6	1,696.0
Montana	1,897	1		1,897.0
Idaho	934			
Wyoming	557		3	371.3
Colorado	3,650	2		1,825.0
New Mexico	789		1	1,578.0
Arizona	860		1	1,720.0
Utah	1,123		1	2,246.0
Nevada	366			
Pacific	31,739	12	3	2,351.0
Washington	6,096	3	1	1,741.7
Oregon	3,918	1	1	2,612.0
California	21,725	8	1	2,709.5

In summary, in table 20 the patient ratio to total personnel in the hospital is indicated. There is no standard ratio with which we may compare the total number of employees in State hospitals for mental disease. The types of personnel vary considerably from hospital to hospital, but the total number of employees is sufficiently large so that comparison may be drawn. In the country as a whole, the ratio of patients to total employees is 5.8. As one would expect, St. Elizabeths Hospital in the District of Columbia has more employees per patient than any State hospital in the country. The State hospitals of Wisconsin should be considered separately since they have predominantly new patients and those who are acutely ill and therefore need more care. Among the other States, the lowest ratio is in New Hampshire and the highest in Montana.

TABLE 20.—*Ratio of patients to total employees in State hospitals for mental disease, 1938*

Region and State	Average daily patient population	Employees		Patient ratio
		Full-time	Part-time	
United States	376,628	65,018	298	5.8
New England	36,698	8,546	8	4.3
Maine	2,633	524		5.0
New Hampshire	2,091	553	3	3.8
Vermont	1,054	203	4	5.1
Massachusetts	21,098	5,270		4.0
Rhode Island	2,617	448		5.8
Connecticut	7,205	1,548	1	4.7
Middle Atlantic	95,439	21,771	40	4.4
New York	69,823	16,529	1	4.2
New Jersey	10,405	2,362	13	4.4
Pennsylvania	15,211	2,880	26	5.3
East North Central	68,675	10,393	27	6.6
Ohio	18,287	2,014	10	9.1
Indiana	8,183	1,067	3	7.7
Illinois	28,876	4,569	1	6.3
Michigan	11,228	2,166	11	5.2
Wisconsin	2,101	577	2	3.6

TABLE 20.—*Ratio of patients to total employees in State hospitals for mental disease, 1938*—Continued

Region and State	Average daily patient population	Employees		Patient ratio
		Full-time	Part-time	
West North Central	36,460	5,137	51	7.1
Minnesota [1]	9,758	1,249	4	7.8
Iowa [2]	6,695	766	11	8.7
Missouri	8,061	1,306	17	6.1
North Dakota	1,818	304		6.0
South Dakota	1,623	272		6.0
Nebraska	3,849	620	6	6.2
Kansas	4,656	620	13	7.4
South Atlantic (excluding District of Columbia)	41,803	5,629	10	7.4
Delaware	1,143	238	2	4.8
Maryland	6,325	935	4	6.8
Virginia	8,795	915	1	9.6
West Virginia	3,468	435	2	8.0
North Carolina	6,511	705	1	9.2
South Carolina	4,171	712		5.9
Georgia	7,187	877		8.2
Florida	4,203	812		5.2
District of Columbia	5,810	1,789	13	3.2
East South Central	20,940	2,442	6	8.6
Kentucky	6,269	612	3	10.2
Tennessee	5,213	598		8.7
Alabama	5,423	634	2	8.5
Mississippi	4,035	598	1	6.7
West South Central	28,888	3,911	119	7.3
Arkansas	4,107	578		7.1
Louisiana	5,548	651	33	8.3
Oklahoma	7,172	873	79	7.9
Texas	12,061	1,809	7	6.7
Mountain	10,176	1,480	12	6.8
Montana	1,897	167		11.4
Idaho	934	104	3	8.9
Wyoming	557	66	3	8.3
Colorado	3,650	702	4	5.2
New Mexico	789	124	1	6.3
Arizona	860	123		7.0
Utah	1,123	155	1	7.2
Nevada	366	39		9.4
Pacific	31,739	3,920	12	8.1
Washington	6,096	811	7	7.5
Oregon	3,918	376	4	10.4
California [3]	21,725	2,733	1	7.9

[1] Does not include Moose Lake State Hospital.
[2] Includes men's reformatory at Anamosa.
[3] Does not include the State narcotic hospital at Spadra.

XIV. General Medical Service

1. LEGAL CONSIDERATIONS

Many persons have no concept of the tremendous effect that certain legal ideas and procedures relative to the care and treatment of the mentally ill in this country have on the opinions of the patient about the hospital and its physicians, and on the community attitude. Indeed there are far too many psychiatrists in some regions who are habituated to the present arrangement and are unable to imagine a better course.

The mass of the patient population in the mental hospitals is under some form of judicial commitment. The procedure may have been carried out with a minimum of annoyance and pain to the patient

and his family, or in many States by a technique that inflicts humiliation on the family and evokes helpless, raging protest from the patient. At any rate, on the basis of proper papers laid before him and with or without bringing the patient into the courtroom for a hearing, some judge has signed an order of commitment. This affects the whole relationship of the hospital organization with the patient. Even in good hospitals a justification for giving the patient less personal attention than he wishes and requires for the understanding and adequate treatment of his illness is that the very important question of his freedom has been decided by law—and decided against him. Where ill-trained or tactless personnel predominate, many indignities are offered to the patient because he cannot make adequate objection, being classed in their thought with another group which is committed—the criminals.

2. COMMITMENT

In American history the mental hospitals have been closely related to almshouses and prisons, and in popular thought they suggest the common fear of losing one's mind; there is so much reluctance to enter them that commitment is the usual method under which patients are received. This was not always the case; when hospitals were few, procedure was simpler and commitment not so frequent. It is usually justified on the ground that many patients object to entering the hospital. In some jurisdictions it is further justified on the ground that the residence of the patient must be established in court before he becomes entitled to care at the expense of the State. Important medical considerations are thus lost sight of through a legalistic attitude, strongly entrenched in tradition.

Commitment procedures in the various States have been reviewed in other publications. Detention in the mental hospital may be possible merely on the basis of a physician's certificate, or it may require a court hearing before a jury. Humane officers try to make these proceedings as easy as possible for the patient but in far too many instances the psychology of the patient is not well understood by the lawyers and laymen around the courthouse or the commission room, as indeed should be expected, and the proceeding is painful. The stigma attached to hospital treatment for mental illness is determined to a considerable extent by the commitment procedure, which is often resented more than are restrictions imposed during the period of residence in the hospital.

3. VOLUNTARY ADMISSION

When given the opportunity to seek treatment in well-conducted hospitals, a considerable number of patients avail themselves of it. The same attitude is shown by a few patients who, being refused volun-

tary admission, seek to be committed rather than be deprived of the treatment that they know they need, but which the laws do not permit them to have on voluntary status. No record of such persons is anywhere kept.

Wherever voluntary patients are received, the proportion of all admissions that they constitute may be considered an index of community attitude toward the efficacy of the treatment afforded by the hospital.

In the United States 7.2 percent of all admissions were voluntary in 1938. In several States the proportion was high: 39.2 in West Virginia, 30.8 in Wisconsin, 25.7 in Kansas, 25.3 in Illinois, 22.7 in Utah, and 17.4 in New Jersey. Peoria (Illinois) State Hospital, under a very liberal policy, received 68 percent of a year's admissions as voluntary. Sixteen States and the District of Columbia admitted no voluntary patients in 1938. Regionally, the lowest percentages occurred in the South and West.

TABLE 21.—*Voluntary admissions to State hospitals*[1] *for mental disease, 1938*

Region and State	Total admissions	Voluntary admissions		Region and State	Total admissions	Voluntary admissions	
		Number	Percent			Number	Percent
United States	100,249	7,195	7.2	South Atlantic—Con.			
New England	9,003	247	2.7	West Virginia	1,374	539	39.2
Maine	606	29	4.8	North Carolina	2,227	.....	.....
New Hampshire	601	95	15.8	South Carolina	1,619	92	5.7
Vermont	346	15	4.3	Georgia	1,308	.....	.....
Massachusetts	5,132	61	1.2	Florida	802	.....	.....
Rhode Island	619	19	3.1				
Connecticut	1,699	28	1.6	District of Columbia	1,056	.....	.....
Middle Atlantic	21,544	1,605	7.4	East South Central	7,540	61	.8
New York	15,998	902	5.6	Kentucky	1,857	3	(2)
New Jersey	2,873	501	17.4	Tennessee	1,744	.....	.....
Pennsylvania	2,673	202	7.6	Alabama	1,796	.....	.....
				Mississippi	2,143	58	2.7
East North Central	19,712	3,033	15.2				
Ohio	3,761	39	1.0	West South Central	8,434	184	2.2
Indiana	1,944	2	(2)	Arkansas	1,843	.....	.....
Illinois	9,610	2,432	25.3	Louisiana	1,543	2	(2)
Michigan	2,725	17	.6	Oklahoma	2,060	1	(2)
Wisconsin	1,764	543	30.8	Texas	2,988	181	6.1
West North Central	8,678	597	6.9	Mountain	2,527	114	4.5
Minnesota	2,306	349	15.1	Montana	531	.....	.....
Iowa[3]	1,539	.....	.....	Idaho	335	.....	.....
Missouri	2,633	6	(2)	Wyoming	121	.....	.....
North Dakota	450	.....	.....	Colorado	515	37	7.2
South Dakota	379	12	3.2	New Mexico	215	.....	.....
Nebraska	726	.....	.....	Arizona	379	.....	.....
Kansas	894	230	25.7	Utah	339	77	22.7
				Nevada	92	.....	.....
South Atlantic (excluding District of Columbia)	11,799	765	6.5	Pacific	9,956	589	5.9
Delaware	341	.....	.....	Washington	1,558	177	11.4
Maryland	1,214	2	(2)	Oregon	1,236	84	6.8
Virginia	2,914	132	4.5	California	7,162	328	4.6

[1] Does not include hospitals for criminal insane.
[2] The number is not sufficiently large to render the percent significant.
[3] One hospital not reported.

In Maryland the certificate of two physicians is sufficient authority for the detention of a mentally ill patient. In Delaware the applica-

tion for admission is made directly to the hospital, not to a court. In New York certain types of cases may be admitted on the certificate of one physician. Various advances have been made towards the more rational and therapeutic procedure, but serious reverses of trend have also occurred. Massachusetts was the first State to permit voluntary admission, but after some years of successful operation of the law, a judge's *obiter dictum* in a guardianship proceeding forced a change in administrative attitude so that obviously suitable voluntary cases are now committed.

4. ADMISSION PROCEDURE

The legal formalities having been arranged, the patient usually comes to the hospital in company of a relative, friend, or person with official status. Procedure varies considerably among the States. Friends and relatives accompany many patients. The hospitals of 16 States, when notified of a commitment, send one or more members of the nursing staff to bring the patient in. In a very large number of States, even some whose general standards are good, the mass of patients are brought in by the police or sheriff, thus forging a link in the chain of parallelism to criminal procedure.

In States that have more than one institution, corresponding admission districts are usually set by law or administrative rule; but in some States the choice of hospitals is left entirely to the patient's family. In six States (Alabama, Maryland, North Carolina, Oklahoma, Virginia, West Virginia) there are separate institutions for Negroes and in two States (Missouri and Texas) Negroes are received only in specified institutions. There are other hospitals where one or more wards are designated for Negroes, for Mexicans, or for any other race that is heavily represented in the patient population; but close lines are seldom drawn.

In most institutions there is a brief routine mental examination made by a physician at the time of the patient's admission. At varying intervals follow a physical examination, laboratory and X-ray studies, and further notes on the mental state. In some places a complete mental status is taken soon after admission, but in many hospitals not enough time is taken at any one sitting to cover a status. Sometimes there is a scheduled number of days during which the patient is expected to stay in bed, without regard to the state of his mind or body.

Histories are obtained at convenience. In States where a nurse goes for the patient, much helpful information is brought in by her. In some city institutions it is possible to interview the relatives of practically all patients at the hospital, and usually within a few days of the patient's admission. In some institutions visits are infrequent, and many histories must be obtained in the field by social workers.

Visiting hours are very little restricted in some institutions, and physicians are expected to drop any other work in order to meet the demands of visitors for interviews. In most institutions definite times are set aside when physicians will be available to discuss matters with the visitor. Visiting days vary from one to seven a week; and the practice of restricting the number of days is usually modified so that persons coming from a distance need not be incommoded.

5. X-RAY FACILITIES

Almost every institution has equipment for roentgenology and even some that are meagerly supported have managed to obtain quite modern apparatus. No type of picture can yet be considered a routine, though several hospitals take pictures of all chests. The most general use of such apparatus is still for the diagnosis of fractures. Ordinarily a technician is provided. The better institutions either have some resident staff member with adequate knowledge of roentgenology or make arrangements with an outside physician to attend at stated intervals and read the films.

6. LABORATORY SERVICE

Every institution has a laboratory, but the capacity and equipment vary greatly. The best organized institutions keep a pathologist in charge. There are a large number of hospitals without a pathologist and in only a few such instances does a pathologist from outside make regular visits. The supply of competent pathologists does not keep pace with the demand and there are frequent vacancies in such positions.

Table 22 shows that even ordinary blood examination is not everywhere available—a very striking deficiency. Though 101 out of 171 hospitals are able to obtain a report on tissue pathology, the examination must in many cases be made in some collaborating institution.

TABLE 22.—*Available laboratory facilities in State hospitals for mental disease, 1938*

Region and State	Number of hospitals represented	Hospitals with facilities available							
		Bacteriology	Basal metabolism	Biochemistry	Blood sedimentation	Hematology	Parasitology	Serology	Tissue pathology
United States	171	142	128	130	142	152	133	120	101
New England	20	15	18	15	16	19	17	11	13
Maine	2	1	1		1	2	1	1	
New Hampshire	1		1	1	1	1	1		1
Vermont	1								
Massachusetts	12	11	12	11	11	12	11	7	9
Rhode Island	1	1	1	1	1	1	1	1	1
Connecticut	3	2	3	2	2	3	3	2	2
Middle Atlantic	31	29	29	29	28	29	29	28	28
New York [1]	20	18	18	18	17	18	18	17	18
New Jersey	3	3	3	3	3	3	3	3	3
Pennsylvania	8	8	8	8	8	8	8	8	7

[1] One hospital not reported.

TABLE 22.—*Available laboratory facilities in State hospitals for mental disease, 1938*—Continued

Region and State	Number of hospitals represented	Hospitals with facilities available							
		Bacteriology	Basal metabolism	Biochemistry	Blood sedimentation	Hematology	Parasitology	Serology	Tissue pathology
East North Central	33	23	23	20	24	24	16	13	14
Ohio	8	6	7	6	8	6	6	5	3
Indiana	6	4	2	2	2	4	1	----	2
Illinois [1]	10	8	8	8	8	8	6	3	6
Michigan [1]	6	5	5	4	5	5	3	5	3
Wisconsin	3	----	1	----	1	1	----	----	----
West North Central	23	20	16	20	21	22	20	19	14
Minnesota	7	7	3	6	7	7	7	6	4
Iowa [1]	4	2	3	2	2	3	2	2	2
Missouri	4	4	4	4	4	4	4	4	3
North Dakota	1	1	----	1	1	1	----	1	----
South Dakota	1	1	1	1	1	1	1	1	1
Nebraska	3	3	3	3	3	3	3	2	2
Kansas	3	2	2	3	3	3	3	3	2
South Atlantic (exc'uding District of Columbia)	19	17	13	17	16	18	15	14	11
Delaware	1	1	1	----	1	1	1	1	1
Maryland	4	3	2	4	3	4	2	1	3
Virginia [1]	4	3	2	3	3	3	3	3	2
West Virginia	4	4	3	4	4	4	4	4	1
North Carolina	3	3	2	3	2	3	2	2	1
South Carolina	1	1	1	1	1	1	1	1	1
Georgia	1	1	1	1	1	1	1	1	1
Florida	1	1	1	1	1	1	1	1	1
District of Columbia	1	1	1	1	1	1	1	1	1
East South Central	10	6	2	1	7	9	6	5	2
Kentucky	3	2	----	----	3	3	3	1	----
Tennessee	3	1	1	----	1	2	1	1	----
Alabama	2	1	1	----	1	2	1	1	1
Mississippi	2	2	----	1	2	2	1	2	1
West South Central	12	12	10	10	11	11	11	11	3
Arkansas	1	1	1	1	1	1	1	1	----
Louisiana	2	2	2	2	2	2	2	2	1
Oklahoma	4	4	2	4	4	4	4	4	1
Texas	5	5	5	3	4	4	4	4	1
Mountain	9	7	5	6	6	6	6	7	4
Montana	1	1	1	----	----	1	1	1	1
Idaho	2	1	1	1	1	1	----	1	1
Wyoming	1	1	----	1	1	1	1	1	----
Colorado	1	1	1	1	1	1	1	1	1
New Mexico	1	1	----	1	1	----	1	1	----
Arizona	1	1	1	1	1	1	1	1	1
Utah	1	1	1	1	1	1	1	1	----
Nevada	1	----	----	----	----	----	----	----	----
Pacific	13	12	11	11	12	13	12	11	11
Washington	3	3	3	3	3	3	3	3	3
Oregon	2	2	2	2	1	2	2	----	2
California	8	7	6	6	8	8	7	8	6

[1] One hospital not reported.

7. NECROPSY SERVICE

The better institutions do as well as most general hospitals in obtaining necropsies. An ordinary rate is considered to be 30 percent, and figures much lower than this are found in institutions that show a less active medical interest. Necropsies are usually performed by some staff physician but in a few instances an attending pathologist is available. Many of the better hospitals keep competent pathologists on their resident staffs.

Neuropathology is a type of information not widely cultivated. In a few States the hospitals aim to maintain neuropathological service, and scattered institutions in other parts of the country equip themselves in the same fashion.

During 1938, 19 percent of deaths in State hospitals for mental disease were autopsied. In some States the proportion is much higher. It is highest in St. Elizabeths Hospital in the District of Columbia where 75.1 percent of all deaths are autopsied.

Generally speaking, those States where the patient ratio per physician is comparatively low are better able to carry on this activity. The East South Central region with the highest patient load per physician of all regions in the country has by far the lowest proportion of autopsies, 0.5 percent. There are, however, exceptions. North Dakota, Florida, New Mexico, and Oregon have a heavy patient load per physician, but nevertheless autopsies are performed on more than 30 percent of hospital deaths.

TABLE 23.—*Percentage of deaths autopsied in State hospitals for mental disease, 1938*

Region and State	Deaths	Autopsies		Region and State	Deaths	Autopsies	
		Number	Percent			Number	Percent
United States	30,706	5,915	19.3	South Atlantic—Continued.			
New England	2,941	875	29.8	West Virginia	418	40	9.6
Maine	216	13	6.0	North Carolina	550	12	2.2
New Hampshire	172	32	18.6	South Carolina	397	26	6.5
Vermont	87	2	2.3	Georgia	420	------	------
Massachusetts	1,610	648	41.1	Florida	273	136	49.8
Rhode Island	245	106	43.3	District of Columbia	281	211	75.1
Connecticut	611	74	12.1	East South Central	2,331	11	.5
Middle Atlantic	7,647	2,084	27.3	Kentucky	767	1	.1
New York	5,663	1,597	28.2	Tennessee	391	10	2.6
New Jersey	974	241	24.7	Alabama	542	------	------
Pennsylvania	1,010	246	24.4	Mississippi	631	------	------
East North Central	5,632	823	14.6	West South Central	2,266	150	6.6
Ohio	1,256	266	21.2	Arkansas	474	5	1.1
Indiana	675	83	12.3	Louisiana	463	94	20.3
Illinois	2,755	291	10.6	Oklahoma	488	25	5.1
Michigan	746	155	20.8	Texas	841	26	3.1
Wisconsin	200	28	14.0	Mountain	778	102	13.1
West North Central	2,650	517	19.5	Montana	170	34	20.0
Minnesota	654	145	22.2	Wyoming	41	3	7.3
Iowa	483	10	2.1	Idaho	87	------	------
Missouri	695	180	25.9	Colorado	241	40	16.6
North Dakota	127	47	37.0	New Mexico	63	20	31.7
South Dakota	104	15	14.4	Arizona	101	3	3.0
Nebraska	228	70	30.7	Utah	53	2	3.8
Kansas	359	50	13.9	Nevada	22	------	------
South Atlantic (excluding District of Columbia)	3,558	482	13.5	Pacific	2,622	660	25.2
Delaware	103	22	21.4	Washington	533	281	52.7
Maryland	519	138	26.6	Oregon	430	196	45.6
Virginia	878	108	12.3	California	1,659	183	11.0

XV. Special Forms of Treatment

The mental hospital must be ready to afford treatment for any illness that may befall the human body. Only in limited measure can patients be transferred to other institutions for treatment. In

the neighboring general hospital the staff may feel unequipped to do for the mental patient what he needs in addition to the treatment of his intercurrent trouble, and other patients may feel distrust and fear of the mentally sick person in the next bed. Hospitals that carry a psychiatric service do not have this difficulty, for a mental patient can go into the psychiatric ward for post-operative or other treatment.

1. SURGERY

Surgery is a specialty that is very likely to have adequate attention. In a few mental hospitals a surgeon is medical director or superintendent. The frequency of surgical operations may be illustrated by the figures from a few recent annual reports.

TABLE 24.—*Surgical operations in certain State hospitals for mental disease*

Hospital	Census	Number of operations
Delaware State Hospital, Delaware	1,061	193
Elgin State Hospital, Illinois	4,653	302
Worcester State Hospital, Massachusetts	2,276	904
New Jersey State Hospital, Greystone Park, N. J	5,278	272
Utica State Hospital, New York	1,645	34

Very small institutions, and a few poorly equipped larger ones, transfer to a general hospital all patients in need of a surgical operation. Owing to the complications that are possible because of the patient's mental condition, it is usual for the mental hospital to furnish nurses or attendants to attend such patients during their stay in the general hospital. A few special surgical procedures, such as an operation for brain tumor, are seldom attempted in any but a special institution.

2. TUBERCULOSIS

Another disorder for which the community erects special hospitals is pulmonary tuberculosis. In a few instances a tuberculosis sanitarium and a mental hospital are operated by the same authority. If mental patients are moved to the sanitarium when they develop tuberculosis, a double standard of care is too likely to result, with discrimination against the mental patients. Their beds will probably stand closer, their surgical treatment be less vigorous, their nursing less thorough. The tuberculous mental patient can obtain the best treatment only in a mental hospital.

Provision for the treatment of tuberculosis is altogether inadequate in a considerable number of mental institutions and both employees and patients are subject to peril of infection, but very fine service is given in the better hospitals. In some instances, wards in a medical building are specially equipped for these cases. More often a separate building is provided with installations that would be required in a

good sanitarium of the same size, with such arrangements and organization as will meet the special needs of the mental patient. Many mental hospitals keep arrested cases under the antituberculosis regime for an indefinite period, since thus they are less liable to relapse than when sent back to some other service.

Where several hospitals are located within convenient distance, tuberculous patients may be better cared for if they are assembled in one institution. This is done in the Province of Ontario, Canada, and is planned for the metropolitan area of New York. Such a concentration makes it easier to provide specially trained staff and special equipment.

A physician already on the mental hospital staff may be interested in the treatment of tuberculosis and perhaps is given opportunity to work on the staff of a tuberculosis sanitarium before he takes charge of the cases in the mental hospital; in other instances a specialist in tuberculosis has been brought into the mental hospital with provision for such instruction as may be needed to enable him to acquire a practical knowledge of psychiatry.

3. SYPHILIS

It is inevitable that in such large assemblies of human beings many cases of syphilis should be found. In a large number of cases (6 percent) the mental disorder is directly traceable to the activity of the syphilitic process in the central nervous system. In other cases the relationship is casual. Both types of syphilis, nervous and constitutional, require vigorous treatment. The present tendency in organizing the medical work of an institution is to place the responsibility for this treatment on special members of the staff and to assemble the patients from various parts of the hospital on treatment day rather than to locate in certain wards all patients that require this treatment or have several physicians administer similar treatment in different sections of the hospital.

4. COMMUNICABLE DISEASES

Contagious disease occurring in a mental hospital is ordinarily treated in some room or dormitory near the point where it develops. The usual contagious hospital would find it difficult to provide psychiatric nursing for a restless mental patient. Since the population of mental hospitals is predominantly adult and the type of life therein is well ordered and healthful, the number of cases of communicable disease is small. Diphtheria in former days created great difficulties by recurring year after year in the same institution; such trouble is now infrequent. Erysipelas also is much more quickly checked than formerly and typhoid is hardly known.

5. SHOCK TREATMENT

Recent methods of treatment for a large number of cases that are grouped under the term "schizophrenia" involve the administration of a drug that produces stupor, coma, or convulsions in varying degree. The two most commonly used are insulin and metrazol. These procedures were adopted rather quickly in institutions all over the country, although there are still some that do not use them, principally because of lack of physicians and nurses who are equipped to manage such drastic procedures. The promptness with which this type of treatment was taken up when announced to the medical profession has been an interesting commentary on the alertness and energy of hospital administrators.

6. OCCUPATIONAL THERAPY

Throughout the history of American institutions, emphasis has been laid on useful work as a mental stabilizer and restorative. In the present century such activities have been expanded and organized under the term "occupational therapy." Employees, usually women, trained in special schools, in schools of art, or in teaching institutions, have been employed to assemble groups of patients and provide them with a variety of occupations. Useful articles are produced, but manufacture is subordinated to inspiring the patient's interest. Perhaps such procedures are no more useful to the mentally sick than to any other group of invalided persons. At any rate their prime value in these hospitals is not disputed. Patients come to the mental hospital with a feeling of unreality. Perhaps they recognize the change in themselves or it may be that they think the world around them is changed, that other people are not as they were. Their first impressions of the mental hospital may make them feel still more convinced of the unreality of things; but work, and especially work in making something beautiful, seems real and is therefore one of the earliest as well as one of the most useful means of combating some of the effects of the mental disorder. So satisfactory have been the results of this type of attack on the problems of the mentally sick that some sort of an organization of therapeutic occupation is found in every hospital. The scope of occupations is so broad that standards vary considerably from one institution to another. The most important variant is the dynamic ability of the occupational therapist—her capacity for leadership. Another variant is the goal set by the superintendent—what he wishes to accomplish. In some institutions the activities of patients are confined to the making of attractive articles to be used about the institution or sold to add something to its meager budget. Such work is useful to those employed but may

fail to reach the very ones who are most in need of help. A patient who develops skill in making brushes or dolls may be kept at that task indefinitely. Patients who are slow, clumsy, apathetic, apprehensive, or restless may be allowed to stay in the shop a day or two and are then sent back to their wards. On the other hand the really skillful occupational therapist uses even cheap materials, sometimes in profusion, to stir the interest of the patients and does not spare her initiative and energy to get some measure of response. Where these activities are employed in this dynamic fashion the numbers reached in any one class may be small but the total results are highly valuable.

Table 18 shows the ratio of patients to personnel engaged in occupational therapy.

The routine hospital industries, when given a proper measure of medical supervision, are of very great therapeutic value. The attitude, interest, personal appearance, and conduct of the patients in an institution where work is emphasized are on a much higher level than in one where the patient is left to his own initiative.

7. PHYSICAL TRAINING

Play is a natural function of all the higher animals. When left to themselves, some patients in mental hospitals undertake a little play, but relatively few participate. Such procedures when organized under skilled leadership draw in many patients and are of profound value to mood and muscle. Group activities are more useful than individual gymnastic exercises because they lead toward social adjustment. A tendency of mental disorder is to make the patient self-centered, but competitive sport combats this tendency. The emotional stimulus of group activity, the joy of competition, the pleasure in success, and the physiological benefits that accompany quickened circulation are mustered for the benefit of the patient.

Clearly such things cannot safely be left to their own development. Competition may be too fierce and excite one patient while it discourages another. One patient may drop out of the game without getting much benefit, whereas another pursues it vivaciously to the point of exhaustion. Jealousies arise, direction is resented, and other psychological evils may result. The leadership must be skilled not only in the technique of sports but more particularly in understanding the patient. Schools of physical education, teachers' colleges, and universities now furnish a plentiful supply of teachers who are qualified as far as sport is concerned. Ordinarily the hospital must teach the special skill required to manage its patients.

8. MUSIC THERAPY

Music is another art whose spontaneous origin within the individual and whose power of solace are effective without organization. It may

be developed into a controlled stimulus to more normal moods and means of release of inner difficulties as well as a medium of gracious social intercourse. A certain amount of individual instruction in music may be desirable, but in a public institution more useful results are obtained from group work. The band, the orchestra, even the rhythm orchestra, contribute happiness to the participants and others. The choir for more formal affairs and the chorus for popular gatherings strengthen group possibilities. Assembled patients, even though dominated by their individual aberrations, may under skillful leadership display an observably better social attitude. Any musician who undertakes this work needs to be thoroughly grounded in knowledge of music and facility of expression. In addition he needs a dynamic personality.

Not all the State hospitals gave indication of the special therapeutic procedures that are maintained, nor of the number of patients that benefit thereby. In all, 166 hospitals responded. Almost all hold some kind of occupational therapy classes. Hydrotherapy and metrazol therapy are also widely employed, while electrotherapy and radiotherapy, physical education, and music therapy are used in only half of the hospitals.

The number of hospitals reporting use of each therapy, by State, is given in table 25 along with the total number of hospitals represented. Two States indicate that no use is made of occupational therapy, but in one of these States only one hospital reported. Hydrotherapy is not administered in three States, while metrazol therapy is omitted in seven. Each of the other types of therapy is much less frequently employed.

TABLE 25.—*Special therapeutic procedures in State hospitals for mental disease, January 1, 1939*

Region and State	Number of hospitals represented	Average daily patient population	Hydrotherapy	Electrotherapy and radiotherapy	Physiotherapy	Physical training	Occupational therapy	Music therapy	Hypoglycemic therapy	Metrazol therapy
United States	166	368,665	138	86	100	79	155	72	106	127
New England	20	36,698	18	10	15	9	19	9	7	16
Maine	2	2,633	1	1	2		2		1	
New Hampshire	1	2,091	1	1	1	1	1	1	1	1
Vermont	1	1,054	1	1			1			
Massachusetts	12	21,098	11	6	9	5	11	5	3	11
Rhode Island	1	2,617	1		1	1	1	1	1	1
Connecticut	3	7,205	3	1	2	2	3	2	1	3
Middle Atlantic	30	94,024	28	22	25	25	30	14	23	24
New York [1]	19	68,408	17	12	17	17	19	7	16	15
New Jersey	3	10,405	3	3	2	3	3	1	3	3
Pennsylvania	8	15,211	8	7	6	5	8	6	4	6
East North Central	33	68,675	26	13	17	24	33	19	21	26
Ohio	8	18,287	7	3	3	5	8	5	7	8
Indiana	6	8,183	3	1	1	4	6	2	3	3
Illinois	10	28,876	10	3	7	6	10	5	7	9

TABLE 25.—*Special therapeutic procedures in State hospitals for mental disease, January 1, 1939*—Continued

Region and State	Number of hospitals represented	Average daily patient population	Hydrotherapy	Electrotherapy and radiotherapy	Physiotherapy	Physical training	Occupational therapy	Music therapy	Hypoglycemic therapy	Metrazol therapy
East North Central—Continued.										
Michigan	6	11,228	5	5	5	6	6	4	4	5
Wisconsin	3	2,101	1	1	1	3	3	3	.....	1
West North Central	22	35,132	16	11	13	7	20	10	18	18
Minnesota	7	10,003	3	3	5	5	7	5	6	5
Iowa [1]	3	5,122	2	2	1	.....	2	.....	2	2
Missouri	4	8,061	4	3	2	1	4	2	3	4
North Dakota	1	1,818	1	1	1	.....	1	.....	.....	.....
South Dakota	1	1,623	.....	.....	1	.....	.....	.....	1	1
Nebraska	3	3,849	3	1	2	1	3	2	3	3
Kansas	3	4,656	3	1	1	.....	3	1	3	3
South Atlantic (excluding District of Columbia)	18	40,582	13	12	10	5	15	8	12	13
Delaware	1	1,143	1	1	1	1	1	1	1	.....
Maryland	4	6,325	3	3	3	1	4	2	4	3
Virginia [1]	3	7,574	2	2	2	1	2	1	2	2
West Virginia	4	3,468	4	3	2	.....	4	1	2	3
North Carolina	3	6,511	.....	.....	.....	.....	1	.....	.....	2
South Carolina	1	4,171	1	1	.....	.....	1	1	1	1
Georgia	1	7,187	1	1	1	1	1	1	1	1
Florida	1	4,203	1	1	1	1	1	1	1	1
District of Columbia	1	5,810	1	1	1	1	1	1	1	1
East South Central	10	20,940	6	2	2	2	9	2	3	6
Kentucky	3	6,269	1	.....	.....	1	3	1	.....	1
Tennessee	3	5,213	2	1	.....	.....	2	.....	2	3
Alabama	2	5,423	1	.....	.....	.....	2	.....	1	1
Mississippi	2	4,035	2	1	2	1	2	1	.....	1
West South Central	12	28,888	12	6	6	2	12	2	8	9
Arkansas	1	4,107	1	.....	.....	1	1	1	.....	1
Louisiana	2	5,548	2	1	1	.....	2	.....	2	2
Oklahoma	4	7,172	4	1	1	.....	4	.....	3	3
Texas	5	12,061	5	4	4	1	5	1	3	3
Mountain	8	9,797	7	2	4	2	7	2	6	5
Montana	1	1,897	1	1	1	1	1	1	1	1
Idaho [1]	1	555	1	1	.....	.....	.....	.....	1	.....
Wyoming	1	557	1	.....	1	1	1	.....	1	1
Colorado	1	3,650	1	.....	1	.....	1	.....	1	1
New Mexico	1	789	1	.....	1	.....	1	.....	.....	.....
Arizona	1	860	.....	.....	.....	.....	1	.....	1	1
Utah	1	1,123	1	.....	.....	.....	1	1	1	.....
Nevada	1	366	1	.....	.....	.....	1	.....	.....	1
Pacific	12	28,119	11	7	7	2	9	5	7	9
Washington	3	6,096	3	3	3	2	3	3	3	3
Oregon	2	3,918	1	1	1	.....	1	.....	2	2
California [1]	7	18,105	7	3	3	.....	5	2	2	4

[1] One hospital not reporting.

9. BIBLIOTHERAPY

Books furnish relaxation, comfort, and instruction to millions of readers. Even poorly supported mental institutions have some books available for a few patients whose initiative suffices to make their wants known. The use of books has been organized of late years in so definite and extensive a fashion as to justify the term "bibliotherapy." This, like many other modern activities, was presaged in what some hospitals did in the 1850's. They were at a disadvantage, however, in having fewer books available and fewer persons who could be considered trained librarians.

Many hospitals have considerable libraries of their own or develop a working arrangement with some public library by which suitable books become available. Arrangements are made under which certain patients go to the library themselves or with their nurses to read or borrow books. The librarian also goes to certain wards where patients are not yet well enough to visit the library and there discusses reading matter and supplies it. Reading clubs of varying aim are organized. Since literature leads easily into art, alliances are readily formed between the library and the departments of occupational therapy, music, and dramatic art. Not only is recreational reading encouraged, but many patients are able to improve their time in the hospital by undertaking definite courses of cultural or even professional reading, and in some instances the library is a stimulus to a certain amount of literary composition.

In table 26 each State hospital has been listed, with the patient ratio to number of volumes in the library. Twenty hospitals failed to make any report and six hospitals reported no library facilities. The hospital with the largest number of volumes per patient is Gardner State Hospital in Massachusetts. The fewest volumes per patient are reported at Mendocino State Hospital in California and Central State Hospital in Indiana, while the Arkansas State Hospital has a ratio not much higher.

TABLE 26.—*Library facilities in State hospitals for mental disease, 1938*

Hospital	Number of volumes	Patient ratio
Arizona:		
Arizona State Hospital	450	0.5
Arkansas:		
Arkansas State Hospital	378	.09
California:		
Agnews State Hospital	2,000	.6
Mendocino State Hospital	200	.07
Patton State Hospital	4,550	1.2
Stockton State Hospital	6,440	1.7
Colorado:		
Colorado State Hospital	3,959	1.1
Connecticut:		
Connecticut State Hospital	3,000	.9
Fairfield State Hospital	1,015	1.1
Norwich State Hospital	1,500	.5
Delaware:		
Delaware State Hospital	1,681	1.5
District of Columbia:		
St. Elizabeths Hospital	17,533	3.0
Florida:		
Florida State Hospital	1,000	.2
Georgia:		
Milledgeville State Hospital	1,200	.2
Illinois:		
Anna State Hospital	1,340	.6
Chicago State Hospital	1,387	.3
East Moline State Hospital	1,172	.5
Elgin State Hospital	6,750	1.5
Kankakee State Hospital	2,335	.6
Manteno State Hospital	500	.1
Peoria State Hospital	1,226	.5
Illinois Security Hospital	500	1.1
Indiana:		
Central State Hospital	150	.08
Evansville State Hospital	1,000	.9
Logansport State Hospital	575	.3
Indiana—Continued.		
Madison State Hospital	2,100	1.3
Richmond State Hospital	756	.5
Indiana Hospitals for Insane Criminals	310	1.1
Iowa:		
Cherokee State Hospital	1,514	.9
Clarinda State Hospital	1,356	.8
Independence State Hospital	2,703	1.5
Kansas:		
Larned State Hospital	300	.3
Osawatomie State Hospital	1,200	.7
Topeka State Hospital	1,200	.6
Kentucky:		
Eastern State Hospital	500	.3
Western State Hospital	300	.2
Maine:		
Augusta State Hospital	1,400	.9
Bangor State Hospital	1,760	1.5
Maryland:		
Eastern Shore State Hospital	160	.4
Springfield State Hospital	3,500	1.3
Spring Grove State Hospital	1,500	.8
Massachusetts:		
Boston State Hospital	1,162	.5
Danvers State Hospital	2,389	1.0
Foxboro State Hospital	2,473	1.8
Gardner State Hospital	5,400	3.8
Grafton State Hospital	2,121	1.4
Medfield State Hospital	2,500	1.3
Metropolitan State Hospital	4,344	2.4
Northampton State Hospital	2,225	1.1
Taunton State Hospital	5,677	3.4
Westborough State Hospital	3,500	2.3
Worcester State Hospital	3,436	1.5
Bridgewater State Hospital	905	1.0

TABLE 26.—*Library facilities in State hospitals for mental disease, 1938*—Con.

Hospital	Number of volumes	Patient ratio
Michigan:		
Ionia State Hospital	1,163	1.3
Kalamazoo State Hospital	6,000	2.2
Newberry State Hospital	1,093	.8
Pontiac State Hospital	2,500	1.4
Traverse City State Hospital	4,219	1.8
Ypsilanti State Hospital	2,404	1.2
Minnesota:		
Anoka State Hospital	1,573	1.1
Fergus Falls State Hospital	3,800	1.9
Hastings State Hospital	1,600	1.5
Moose Lake State Hospital	600	2.4
Rochester State Hospital	2,556	1.6
St. Peter State Hospital	1,900	.9
Willmar State Hospital	2,500	1.7
Mississippi:		
Mississippi State Hospital	2,500	.8
Missouri:		
State Hospital No. 1	1,377	.6
State Hospital No. 2	2,607	1.0
State Hospital No. 3	2,000	1.1
State Hospital No. 4	1,200	.8
Montana:		
Montana State Hospital	700	.4
Nebraska:		
Hastings State Hospital	1,765	1.1
Lincoln State Hospital	1,075	.9
Norfolk State Hospital	1,600	1.5
Nevada:		
Nevada State Hospital for Mental Diseases	300	.8
New Hampshire:		
New Hampshire State Hospital	2,369	1.1
New Jersey:		
Graystone Park State Hospital	8,587	1.6
Marlboro State Hospital	2,006	.9
Trenton State Hospital	5,000	1.7
New Mexico:		
New Mexico State Hospital	75	.1
New York:		
Binghampton State Hospital	5,199	1.9
Brooklyn State Hospital	1,410	.7
Buffalo State Hospital	1,271	.5
Central Islip State Hospital	5,676	.9
Dannemora State Hospital	515	.5
Gowanda State Hospital	1,777	.8
Harlem Valley State Hospital	2,820	.6
Hudson River State Hospital	7,000	1.6
Kings Park State Hospital	1,885	.3
Manhattan State Hospital	4,596	1.4
Marcy State Hospital	3,000	1.3
Middletown State Hospital	8,000	2.5
Pilgrim State Hospital	3,498	.4
Rochester State Hospital	2,000	.6
Rockland State Hospital	3,213	.6
St. Lawrence State Hospital	2,255	1.0
Utica State Hospital	500	.3
Willard State Hospital	2,987	1.0
North Dakota:		
North Dakota State Hospital for Insane	2,800	1.5
Ohio:		
Athens State Hospital	1,406	0.8
Cleveland State Hospital	2,065	.8
Columbus State Hospital	2,586	1.0
Dayton State Hospital	1,200	.7
Lima State Hospital	1,000	.9
Longview State Hospital	3,300	1.3
Toledo State Hospital	7,000	2.6
Oklahoma:		
Central State Hospital	1,048	.4
Eastern State Hospital	4,816	1.9
Western State Hospital	875	.6
Oregon:		
Eastern State Hospital	500	.4
Oregon State Hospital	5,250	2.0
Pennsylvania:		
Allentown State Hospital	3,423	2.1
Danville State Hospital	7,000	3.6
Farview State Hospital	700	.6
Harrisburg State Hospital	4,812	2.4
Norristown State Hospital	4,000	1.1
Torrance State Hospital	400	.2
Warren State Hospital	3,500	1.6
Wernersville State Hospital	1,300	.9
Rhode Island:		
State Hospital for Mental Diseases	3,420	1.3
South Carolina:		
South Carolina State Hospital	1,396	.3
South Dakota:		
Yankton State Hospital	1,500	.9
Tennessee:		
Eastern State Hospital	450	.3
Western State Hospital	2,225	1.1
Texas:		
Austin State Hospital	589	.2
Rusk State Hospital	2,000	.9
San Antonio State Hospital	2,006	.7
Terrell State Hospital	325	.1
Wichita Falls State Hospital	400	.2
Utah:		
Utah State Hospital	780	.7
Vermont:		
Vermont State Hospital for the Insane	1,550	1.5
Virginia:		
Central State Hospital	487	.1
Washington:		
Eastern State Hospital	665	.4
Western State Hospital	3,894	1.6
West Virginia:		
Huntington State Hospital	500	.5
Spencer State Hospital	500	.6
Wisconsin:		
Mendota State Hospital	656	.7
Winnebago State Hospital	581	.7
Central State Hospital for the Insane	1,010	3.1
Wyoming:		
Wyoming State Hospital	250	.4

10. DIVERSION

Recreation is a term often broadly employed to include several of the procedures mentioned in earlier paragraphs. It is reserved here for those amusements that aim to take one out of himself for the time being without requiring special effort on his part. Such pastimes must be provided in much larger measure in a mental hospital (whose patients are mostly ambulant) than in a hospital where acutely sick persons predominate. Concert, drama, dances, field day, and other festivities, excursions to the county fair or the circus, and above all the moving pictures are appreciated and helpful in this field.

11. GROUND PRIVILEGES

How much freedom shall be accorded to patients to come and go as they will is sometimes considered an administrative question, but such opportunities can be organized so as to prove of therapeutic benefit. Some patients appreciate so highly the haven to which they have fled from their troubles and maintain such reliable standards of conduct that ground privileges of any specified breadth may be granted and will be meticulously observed. Some patients show rebellion against social standards, prurient overactivity, or faulty memory of their promises so disabling that they must be constantly accompanied by an employee. Between these extremes there are all gradations of attitude and conduct.

In some hospitals mischance is carefully guarded against, few privileges are granted, and reliance in treatment is placed on constantly training the patient in regular ways of doing things, so that when he leaves he will have well-established habits. In others emphasis is laid upon the need of the human being for opportunity to direct his own course, even at the price of some errors, and on his responsiveness to properly organized opportunity to make his own plans.

Local conditions, structural and other, enter into the problem. An institution with extensive enclosures might find it easier to accord freedom of movement to a large number of patients. Hospitals with low admission rates and a considerable accumulation of patients with long residence may in the course of years build up a very large group who will look after themselves and each other throughout the day. On the other hand, a hospital with a large proportion of new patients will need to be conservative, for many of the patients are still in the turbulent phase of their illness; the physician needs to be well acquainted with his patient before leaving to the sick man his own direction.

Table 27 shows the population and number having ground privileges in a few hospitals; the number may fluctuate considerably within a few days.

TABLE 27.—*Patients having ground privileges in certain State hospitals for mental disease*

Hospital	Population	Number with ground privileges	Percentage
Stockton State Hospital, Stockton, Calif	3,803	210	5.5
Northampton State Hospital, Northampton, Mass	2,021	207	10.2
Newberry State Hospital, Newberry, Mich	1,321	100	7.6
Willmar State Hospital, Willmar, Minn	1,424	562	39.5
New Hampshire State Hospital, Concord, N. H	2,135	459	21.5
Central Islip State Hospital, Central Islip, N. Y	6,554	350	5.3
Longview State Hospital, Cincinnati, Ohio	2,544	618	24.3
Eastern State Hospital, Vinita, Okla	2,646	200	7.6
Allentown State Hospital, Allentown, Pa	1,607	140	8.7
South Carolina State Hospital, Columbia, S. C	4,262	1,100	25.8
San Antonio State Hospital, San Antonio, Tex	2,705	410	15.2
Eastern State Hospital, Williamsburg, Va	1,624	75	4.6

XVI. Special Groups of Patients

1. OLD AND FEEBLE

The aged and infirm constitute a large and increasing part of the population of mental hospitals in all sections of the country. Several reasons are given for this increase:

1. The average age of the general population is increasing; hence there are more persons old enough to develop senile or arteriosclerotic disorders. Especially in urban surroundings it is difficult to care for such persons at home.
2. As the hospitals improve, people have more confidence in them and are more willing that their relatives should be cared for there.
3. Formerly the simpler type of almshouse care was considered adequate for old people unless they were very difficult to manage. In line with the present-day demand for better and more extensive medical service, people are now unwilling to accept almshouse standards for aged members of the community and any mental impairment is, therefore, considered an adequate reason for State hospital care.
4. The economic depression has impaired the resources of many families that in better times would have kept their aged members at home.

The extension of social security and old age benefits should, if rightly manipulated, reduce the number of aged people in the mental hospitals. It is said that this has occurred in some European countries. No such effect has yet been obtained in the United States.

The presence of these increasing numbers of somewhat feeble patients is only beginning to affect the architecture of the hospital. Ideally such patients should be in one-story structures from which they can easily be taken out of doors. Some are now housed as high as the fourth story; few can get outside because of the difficulty of climbing the stairs.

2. MENTAL DEFECT

Except in a few States with very small populations, there is usually at least one institution for the care and training of mental defectives. Nevertheless there may be as many or more mental defectives in the State hospitals. This may be due to a number of reasons:

1. The school for mental defectives is never large enough to take all cases for whom application is made. Waiting lists are the rule, avoided only by flat rejection of patients who may be quite suitable for admission but whose application is made when all beds are taken. If some defective becomes such a burden to his family and community that his further care becomes intolerable, he is likely to be sent to the State hospital, which indeed is expected to undertake the care and treatment of any community problem that cannot be managed anywhere else.
2. A considerable number of defectives already institutionalized develop an intercurrent mental illness and are transferred from the training school to the hospital. The illness passes but the patient cannot be sent back to the school because, in the interval,

others have been taken from the waiting list and have filled the beds. Thus a situation can arise under which, it is said, a hospital in Massachusetts has received so many patients from such schools that now 20 percent of its population has come from that source.

The defectives are seldom housed by themselves except when they are low-grade cripples, mental or physical. Defectives are scattered among various groups of patients where they can make themselves useful within the scope of their ability.

3. EPILEPSY

It is known that persons suffering from convulsive disorders constitute a considerable number in any community, though no complete census of such persons has ever been obtained. Exclusions from military service during the World War were 2.1 percent. A large number of epileptic patients are treated by their family physicians or get along without any treatment if their convulsions are infrequent and not incapacitating. In other cases there develops a characteristic and penetrating dilapidation of interest and conduct associated with the disorder, and in some instances confused states of disastrous degree occur.

Several States have special institutions for the epileptics. A considerable number care for epileptics along with the mental defectives. The excited epileptic is usually taken to the mental hospital. The number of epileptics in a hospital depends very largely upon what provisions there may be for transferring the patient to another type of institution when his excitement is ended. Most hospitals have a considerable number of epileptic patients who could be cared for under simpler arrangements but are not quite capable of going into the community and perhaps have no homes.

Some large hospitals have special wards in which most of the epileptics are quartered, but since the emotional attitude and the intellectual ability of epileptic patients varies widely it is more usual to find the convulsive cases scattered throughout the institution in accordance with the standard of conduct of the individual patient.

4. CRIMINAL INSANE

The so-called criminal insane are separated from other patients because of social and medical considerations. Some of these persons have led disreputable lives for many years and would be undesirable companions in any environment. Other patients object to being quartered with them, and the relatives of patients are particularly critical of such an arrangement.

Among insane criminals there are likely to be a few desperate individuals who are ready at every opportunity to commit assault without apparent provocation. Since personnel is limited, both in numbers and in patience, resort is had to security of structure to keep such

patients within visible bounds and to assure the safety of those with whom they would otherwise come in contact. This necessary measure of safety may be carried out most humanely. The opportunities of this type of patient for personal hygiene, for exercise, and for conversation with his fellows may be extremely well managed. On the other hand, in one hospital whose standards are generally creditable there is a steel cage on one of the upper floors in which one or two men are kept month after month, receiving the fundamentals of attention but compelled to live a cramped life in the space of a bedroom.

The commission of crime by a mentally sick person may be accidental; one whose standards of conduct were sound before his mental illness may become uninhibited and through design or merely through carelessness run afoul of the ordinances and laws. When this situation is recognized criminal charges are usually dropped and the patient is sent to a civil hospital, without the stigma of being labeled a criminal. But in a quite parallel case the situation may not be understood by the authorities and recognition of mental illness may occur so late in the legal proceedings that the patient must be sent to live with insane criminals rather than with insane honest men. Thus the distinction between the civil and criminal insane is not clear. From other angles also the matter is obscure. In the civil hospitals an occasional patient becomes very aggressive; his conduct before the illness may have been blameless but he now destroys property and attacks persons, and nursing becomes a difficult matter in the ordinary institution. In many States such persons may by stated procedure be transferred to the institution for insane criminals although no criminal conduct has ever been alleged. This further breaks down the clarity of the legal classification, which indeed is of only minor importance.

Then again there is a difference between sexes. Far more men than women are incarcerated because of breaking laws. There is a general tendency to look more leniently upon the woman offender and to save her if possible from unpleasant association with a criminal group. Thus there are found in the civil hospitals mentally sick women who have committed offenses and who might under stricter procedure have been sent to an institution for insane criminals. It may be remarked that the State of Pennsylvania has no special institution for women who are rated as insane criminals, whereas it does have such an institution for men.

The following list shows the special provision for the criminal insane in all States having more than one mental hospital:

New England:

Maine: Augusta State Hospital, Augusta.

Massachusetts: Bridgewater State Hospital, State Farm (men).[1]

Connecticut: Connecticut State Hospital, Middletown.

[1] Hospitals for criminal insane only.

Middle Atlantic:
New York: Dannemora State Hospital for Criminals, Dannemora.[2]
Matteawan State Hospital, Beacon.[1]
New Jersey: New Jersey State Hospital, Trenton.
Pennsylvania: Farview State Hospital, Waymart (men).[1]
Allentown State Hospital, Allentown (women).
East North Central:
Ohio: Lima State Hospital, Lima.[1]
Indiana: Indiana State Hospital for Insane Criminals, Michigan City.[2]
Illinois: Illinois Security Hospital, Menard.[1]
Michigan: Ionia State Hospital, Ionia (men)[1] (women are scattered).
Wisconsin: Central State Hospital for the Insane, Waupun.[1]
West North Central:
Minnesota: St. Peter State Hospital, St. Peter.
Iowa: State Reformatory, Anamosa (men)[1] (women are scattered).
Missouri: State Hospital No. 1, Fulton.
Nebraska: Norfolk State Hospital, Norfolk.
Kansas: Asylum for Dangerous Insane, Lansing.[1] (These patients were removed to Larned State Hospital on March 27, 1939.)
South Atlantic:
Maryland: Crownsville State Hospital, Crownsville (Negro).
Spring Grove State Hospital, Catonsville (white).
Virginia: Central State Hospital, Petersburg (Negro).
Southwestern State Hospital, Marion.
West Virginia: Lakin State Hospital, Lakin (Negro).
Weston State Hospital, Weston.
North Carolina: State Hospital, Goldsboro (Negro).
State Hospital, Raleigh.
East South Central:
Kentucky: Central State Hospital, Lakeland.
Tennessee: Central State Hospital, Nashville.
Alabama: Bryce Hospital, Tuscaloosa.
Searcy Hospital, Mt. Vernon (Negro only).
Mississippi: Mississippi State Hospital, Whitfield.
West South Central:
Louisiana: East Louisiana State Hospital, Jackson.
Oklahoma: Taft State Hospital, Taft (Negro).
Central Oklahoma State Hospital, Norman.
Texas: Rusk State Hospital, Rusk.
Mountain:
Idaho: State Hospital South, Blackfoot.
Pacific:
Washington: Eastern State Hospital, Medical Lake.
Oregon: Oregon State Hospital, Salem.
California: Mendocino State Hospital, Talmadge.

[1] Hospitals for criminal insane only.

XVII. Food: Its Production, Preparation, and Service

Food used in the mental hospitals is obtained from three sources: (1) The hospital farm; (2) other public institutions; (3) purchase.

Public mental hospitals on the average control about 1,100 acres of land, a considerable part of which is cultivated. The fertility of these plots varies greatly, from quite inferior soils to some exceptionally

fine ones. Most public mental hospitals have a farm and a dairy herd. Some of these herds have been notable, such as the Pontiac strain of Holstein cattle, famous for milk production. Most hospitals keep poultry. Those not too near cities raise hogs. The value of foodstuffs produced on the hospital farms is not easily calculated since it does not bring in actual money but mere book credit. There are many standards of appraisal. The value of produce raised by the New York State service for the year 1936 was $668,600 and the milk was worth $465,800; these are careful estimates. In some States the produce is overvalued for the hospital farmer lets vegetables get too old and fibrous for good eating, so as to credit his department with the extra weight.

Some say that hospital farms do not pay and should be given up. It is doubtful whether this is true. Not only is the first grade of produce consumed but also second and third grades, for instance, specked or otherwise slightly damaged fruits, just as in the average home. Since the work of gathering this second- and third-rate produce is done by the patients and costs the hospital nothing, there would seem to be every reason to extend the present system and to encourage institutions to raise far more of their foodstuffs. Irrigation of a truck plot is occasionally used to increase production.

There are two opinions regarding the need of food storage space in hospitals. Some would save maintenance costs by depending on frequent deliveries from wholesalers; they say that contracts placed far in advance of consumption are likely to result in loss rather than saving. Others point out that this method can hardly apply to produce raised on the farm. The better hospitals have large root cellars and ample refrigeration in the storehouse. Milk storage is small since milk is (or should be) pasteurized and consumed promptly. A hospital that raises beef and pork is at an advantage if ample storage space is available. Savings have been made by slaughtering poultry when laying ceases, and freezing it for consumption later in the winter. Newer methods of quick freezing and preserving of foods have already brought about an improvement of diet in many hospitals.

The preparation of food is directed by a chef or a dietitian and usually the steward carries responsibilities in this field. Where no dietitian is employed, there is usually a nurse or housekeeper who at least collaborates with the chef. If the dietitian has had good experience and has executive ability she is likely to be placed in charge; otherwise she advises but does not control. It is thought that wages for chefs and cooks are generally too low, that the overturn is too high, and that better standards in the kitchen would result in more satisfaction to the patients.

The amounts allowed for food in the hospital budget are apt to be low and economy is the rule. A few figures are shown in table 28.

TABLE 28.—*Per diem costs in selected States per person fed*

	Cost of food purchased	Cost of food produced	Total
New York	$0.194	$0.025	$0.219
St. Elizabeths Hospital, Washington D. C	.308	.090	.398
Illinois			.164
New Jersey	.138	.059	.198
Pennsylvania	.126	.082	.208

That a standard ration allowance with proper balance of diet is desirable has been long recognized in some States. In others, the choice of foods is made by a less scientific scheme.

There is no standard ratio of dining rooms to the number of persons served, and the usual basis of distribution is topographical, locations being so chosen that prepared foods need not be carried unduly far. In the older institutions it was the custom to have a dining room for every ward. Not much apparatus was required. The food was either kept hot in the container in which it was brought to the ward or else it was eaten cool. Dishes were kept in the pantry and there was a sink for washing them. The service of food to small groups has some advantages; meals are more intimate and preparations for the meal and cleaning up afterward partake of the satisfactions of household activity. On the other hand, supervision is difficult and standards vary from ward to ward.

The present tendency is to decrease the number of dining rooms and increase the extent of their operation. As better apparatus for keeping food warm came into the market there was less incentive to maintain the small scattered units. Several dining rooms would be combined. Gradually there developed the so-called congregate dining room, and as many as 1,700 patients have been thus accommodated in one building and fed at one time.

The service in the large dining room may be good, if hot foods are served only after the patients are seated. Dining rooms have been seen where several hundred plates are filled before any patient is allowed to come in and eat. Indeed there are thousands of patients in American mental hospitals who have no assurance of a hot meal.

There are other difficulties about the large dining rooms. Since they are expected to accommodate most of the hospital population, poor table manners are unhappily obvious to many patients whose own methods of handling their food are acceptable. Peculiar behavior, also, may be stimulated by a large audience. Human beings accustom themselves to all sorts of circumstances, and perhaps the appetite has not often been lost because of what other people do, but there certainly have been complaints. Those who wished to concentrate

the transportation of food and at the same time maintain classification of their patients developed groups of dining rooms around a common pantry.

In 1922 the cafeteria method of service was first employed for patients in a mental hospital at Kalamazoo, Michigan. It is now very popular with hospital administrators, who consider it economical in several regards and advantageous to the patients as well. Its advantages are said to be: (1) Economy of food, for each patient is given only as much as he wishes; (2) less waste in the kitchen and pantry, because supervision is easier; (3) less floor space needed, because patients arrive at different times; (4) the pleasant association of patients eating together; (5) food kept hot and attractive; (6) choice between articles of diet; (7) supervision in the dining room is easier and better.

There are drawbacks to overcome: (1) Patients may have to stand too long while waiting to reach the counter; (2) those whose manners are unacceptable are obvious to others; (3) friction is possible over a place in line; (4) service may be too fast to be neat; (5) trays and dishes may not match, and are unattractive; (6) fluids spill while the trays are being carried.

Any large hotel employs several different types of service in its various dining rooms. Probably there is need in a large hospital for all the good types of service. The cafeteria has overcome many of the difficulties that came with the enlargement of hospitals, but it may not be the ultimate choice of those who wish service neat, fluids unspilled, dishes attractive, clatter at a minimum, and surroundings calculated to cause enjoyment of the meal hours. At present, the best operated dining rooms of large size are cafeterias.

XVIII. Educational Activities of Mental Hospitals

Mental hospitals, by training physicians, nurses, and other personnel in their work, not only raise their own standards of treatment but also furnish to the community a larger number of intelligent and well-informed persons to support measures of mental hygiene. In this way not only patients in the institution are helped but also mental patients in the community.

1. TRAINING OF MEDICAL STUDENTS AND GRADUATES IN MEDICINE

Since a large part of every physician's practice is spent in dealing with psychiatric problems, it is important that all physicians should have knowledge of the deviated activities of the human mind and its capacities for adjustment. Psychiatrically minded internists and surgeons are greatly needed among the professional forces of any community, and the responsibility for training physicians to this attitude of mind is recognized in many institutions as a direct responsi-

bility of the mental hospital. Such instruction is provided during the medical course by lectures and out-patient work and usually by demonstrations in some mental hospital or psychiatric service of a general hospital. Several mental hospitals receive medical students for a stated period of work and instruction. This arrangement is perhaps best organized in Boston, where two medical schools place their students in a mental hospital for a short period. The same arrangement exists at the University of Vermont.

An important responsibility of the mental hospital is the maintenance of residences in psychiatry. The thorough organization of the teaching possibilities of mental hospitals in psychiatry has not proceeded so far as is the case in several other specialties. Standards of rotation of service, study of psychiatric literature, and mastering of therapeutic procedures, for instance, have not been well formulated. However, progress is being made in these fields. The American Medical Association has approved 76 institutions for this purpose.

State hospitals approved by the American Medical Association for training of resident physicians in psychiatry, 1938

State Hospitals:

California: Mendocino State Hospital.
Colorado: Colorado Psychopathic Hospital.
Connecticut: Connecticut State Hospital.
Delaware: Delaware State Hospital.
Illinois: Elgin State Hospital.
Indiana: Central State Hospital.
Logansport State Hospital.
Iowa: Iowa State Psychopathic Hospital.
Kansas: Osawatomie State Hospital.
Maryland: Springfield State Hospital.
Spring Grove State Hospital.
Massachusetts: Boston Psychopathic Hospital.
Boston State Hospital.
Danvers State Hospital.
Foxborough State Hospital.
Gardner State Hospital.
Grafton State Hospital.
Medfield State Hospital.
Monson State Hospital.
Northampton State Hospital.
Taunton State Hospital.
Westborough State Hospital.
Worcester State Hospital.
Michigan: Pontiac State Hospital.
Traverse City State Hospital.
Ypsilanti State Hospital.
Minnesota: St. Peter State Hospital.
Missouri: State Hospital No. 1, Fulton.
State Hospital No. 2, St. Joseph.
Nebraska: Hastings State Hospital.
Norfolk State Hospital.

New Hampshire: New Hampshire State Hospital.
New Jersey: New Jersey State Hospital, Greystone Park.
New Jersey State Hospital, Marlboro.
New York: Binghamton State Hospital.
Buffalo State Hospital.
Central Islip State Hospital.
Gowanda State Homeopathic Hospital.
Hudson River State Hospital.
Kings Park State Hospital.
Marcy State Hospital.
Middletown State Homeopathic Hospital.
New York State Psychiatric Institute and Hospital.
Rochester State Hospital.
St. Lawrence State Hospital.
Utica State Hospital.
Ohio: Columbus State Hospital.
Longview State Hospital.
Toledo State Hospital.
Pennsylvania: Allentown State Hospital.
Danville State Hospital.
Norristown State Hospital.
Warren State Hospital.
Rhode Island: State Hospital for Mental Diseases.
Texas: Galveston State Psychopathic Hospital.
Washington: Eastern State Hospital.
Northern State Hospital.
Western State Hospital.

Private Hospitals:
California: Compton Sanitarium.
Connecticut: Neuro-Psychiatric Institute of the Hartford Retreat.
Kansas: Menninger Sanitarium.
Maryland: Sheppard and Enoch Pratt Hospital.
Massachusetts: McLean Hospital.
New York: Hastings Hillside Hospital.
Neurological Institute of New York.
New York Hospital—Westchester Division.
Ohio: Harding Sanitarium.
Pennsylvania: Institute of the Pennsylvania Hospital.
Pennsylvania Hospital, Department of Mental and Nervous Diseases.
Philadelphia Orthopaedic Hospital and Infirmary for Nervous Diseases.
Rhode Island: Butler Hospital.
Wisconsin: Milwaukee Sanitarium.

City and County Hospitals:
Michigan: Eloise Hospital for Mental Diseases.
Missouri: City Sanitarium, St. Louis.
New York: Central and Neurological Hospital.
Wisconsin: Milwaukee County Hospital for Mental Diseases.

Source: Journal of the American Medical Association, March 11, 1939.

In spite of efforts that have resulted in such an extensive list as this, there are still young physicians eagerly seeking training in psychiatry who are not able to find hospitals organized to give what they seek.

Diagnostic training involves accurate history-taking, covering not only the events of the patient's life but also the characteristics of his personality, the correlation of the results of physical and laboratory examination with other matters in the patient's history, recognition of the dynamic factors in the development of the ailment, and the exercise of medical judgment in diagnosis and subsequent therapy. A grasp of pathological diagnosis, especially of the nervous system, is important in correlating post-mortem findings with earlier symptomatology.

Occasionally a hospital offers a short course in diagnosis and therapy to groups of practicing physicians who wish to extend their knowledge in this field.

Cooperation with local medical organizations is the rule, and few are the mental hospitals that do not from time to time contribute liberally to the program of the local medical society and give its members opportunity to observe at first hand the procedures employed.

2. TRAINING OF NURSES IN PSYCHIATRIC NURSING

Schools of nursing in mental hospitals offer several types of training:

(*a*) A full course in general nursing, a year or more of the 3 years being spent in general hospitals where medicine, surgery, urology, obstetrics, and diseases of children can be better taught.

(*b*) Affiliate courses for student nurses from general hospitals. These last from 2 to 4 months, and give the pupil nurse a much better appreciation of the problems of mental nursing and the personal problems of the nurse than is likely to be obtained in any other way.

(*c*) Postgraduate training for graduate nurses. Ordinarily from 6 to 12 months.

(*d*) Simpler courses for attendants. The latter type of course is also given in many institutions that do not profess to maintain a training school.

Of the 70 general hospitals maintaining a psychiatric service, 46 have schools of nursing. In most of these some portion of the nurses' time is assigned to the psychiatric service.

The following lists show the mental hospitals that give a full course in nursing, and those that receive affiliate undergraduates and offer postgraduate courses.

Mental hospitals maintaining schools of nursing accredited by State Board of Nurse Examiners

Federal Hospital:

District of Columbia: St. Elizabeths Hospital.

State Hospitals:

Alabama: Bryce Hospital.

Connecticut: Connecticut State Hospital.

Delaware: Delaware State Hospital.

Florida: Florida State Hospital.

Georgia: Milledgeville State Hospital.

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State Hospitals—Continued.
Massachusetts: Danvers State Hospital.
Medfield State Hospital.
Taunton State Hospital.
Worcester State Hospital.
Michigan: Kalamazoo State Hospital.
Traverse City State Hospital.
Minnesota: Fergus Falls State Hospital.
Rochester State Hospital.
St. Peter State Hospital.
New Hampshire: New Hampshire State Hospital.
New Jersey: New Jersey State Hospital, Greystone Park.
New York: Binghamton State Hospital.
Brooklyn State Hospital.
Buffalo State Hospital.
Central Islip State Hospital.
Creedmoor State Hospital.
Gowanda State Hospital.
Harlem Valley State Hospital.
Hudson River State Hospital.
Kings Park State Hospital.
Manhattan State Hospital.
Middletown State Hospital.
Rochester State Hospital.
Rockland State Hospital.
St. Lawrence State Hospital.
Utica State Hospital.
Willard State Hospital.
North Carolina: North Carolina State Hospital, Raleigh.
Ohio: Cleveland State Hospital.
Toledo State Hospital.
Pennsylvania: Allentown State Hospital.
Danville State Hospital.
Rhode Island: State Hospital for Mental Diseases.
South Carolina: South Carolina State Hospital.
Texas: San Antonio State Hospital.
City and County Hospitals:
New Jersey: Essex County Hospital.
Private Hospitals:
Massachusetts: McLean Hospital.
Pennsylvania: Pennsylvania Hospital, Department of Mental and Nervous Diseases.
Rhode Island: Butler Hospital.

Source: Journal of the American Medical Association, March 11, 1939.

Mental hospitals affiliated for nurse training on State accrediting basis

State Hospitals:
Colorado: Colorado State Hospital.
Idaho: Idaho State Hospital, South.
Illinois: Chicago State Hospital.
Peoria State Hospital.
Kansas: Osawatomie State Hospital.
Massachusetts: Worcester State Hospital.
Nebraska: Hastings State Hospital.

State Hospitals—Continued.
New York: Marcy State Hospital.
New York State Psychiatric Institute and Hospital.
Washington: Northern State Hospital, Sedro Woolley.
Western State Hospital, Fort Steilacoom.
City and County Hospitals:
Pennsylvania: Lancaster County Home and Hospital for Insane.
Missouri: City Sanitarium, St. Louis.
Private Hospitals:
California: Compton Sanitarium.
Iowa: St. Bernard's Hospital.
Maryland: Mount Hope Retreat.
Sheppard and Enoch Pratt Hospital.
Michigan: St. Joseph's Retreat.
New York: New York Hospital, Westchester Division.
Neurological Institute of New York.

Source: Journal of the American Medical Association, March 11, 1939.

3. TRAINING OF OTHER PERSONNEL

One mental hospital (Kalamazoo, Mich.) conducts a school of occupational therapy. Students in several other schools of occupational therapy are regularly assigned for their field work to one or another mental hospital. Other schools of vocational training whose students receive part of their work in mental hospitals are those teaching physical education, physiotherapy, library management, social work, and theology.

XIX. Community Service

The early superintendents of the mental hospitals were usually outstanding practitioners, and their services in consultation were likely to be much in demand. This was one of the ways in which they kept well in touch with the medical profession in the district. This situation changed during the last century; mental hospital physicians were less likely to be called to advise on the treatment of bodily disorders. Medico-legal cases were brought to their attention, for nowhere else could the same amount of experience with and understanding of such problems be found, except in a few large cities where there might be specialists in the treatment of mental diseases.

Every mental hospital has maintained some informal out-patient service through discussion with the relatives of sick people in the community who come to the hospital to ask for advice. Such work was generally not organized until recent years. After 1900 the demand for out-patient service became more insistent, at first on the ground of the needs of former patients. A patient who had improved sufficiently to go home might not get on well in the old environment without help. To meet this situation, "aftercare committees" were formed at several hospitals. These were composed of public-spirited persons who were interested in the institution and were willing to give

time to bettering the home situation of former patients who might need moral or financial support for a while.

Such important work could not long remain on a volunteer basis, and over three decades ago social workers began to find employment in the mental hospitals. Immediately there was better supervision of patients who were on visit in their homes or elsewhere outside the hospital.

The social worker soon found matters on which she wanted medical advice. Perhaps it could be obtained near the patient's home, or perhaps a question arose that needed the attention of one of the hospital physicians; but under conditions as they were, that opinion was seldom available at any point nearer than the mental hospital. Then the neighborhood began to bring other problems to the attention of the social worker. The family of a former patient might include some young person who was not doing well; or the neighborhood might hear that a representative of the hospital was around and proceed to bring out other persons who needed psychiatric attention. Of course the worker might carry questions about such patients to the hospital physician, but medical advice carried from a distance is satisfactory neither to the giver nor to the recipient.

The best answer to the questions raised by such a situation was to send a physician to populous centers in the hospital district at stated times and have him hold a clinic. This has become a usual arrangement, though there are still States in which the hospitals accept no responsibility for the general mental health of their districts. Clinics are sometimes held in the office of a social agency, sometimes in the rooms of a parole officer, but preferably in some hospital or dispensary. A social worker, either from a hospital or from a local agency, assembles the patients whom a physician will see during his visit and arranges to have someone carry out any instructions that he may give about treatment. If the hospital has a psychologist, she helps particularly in studying the problems of children. Perhaps a nurse attends the clinic. Of the 162 mental hospitals reporting in 1936, 74 were carrying on active out-patient work.

In this connection an arrangement in the State of Massachusetts requires comment. It is provided by law that all school children who are three or more years retarded in school shall be examined by a psychiatrist, and provision for such examinations must be made by the State Department of Mental Health. Most of the State hospitals and State schools keep a physician in the field throughout the school year. This physician goes from town to town in a designated district and sees children who come within the scope of this law. Inevitably

he is called upon to advise also with regard to other children whose conduct and attitude give concern. Though a few school systems have preferred to set up their own psychiatric service, the work of the State institutions in this field is enormous.

There were other community agencies that sought advice. Family case workers, school teachers, and court officers wished special examinations of some of the persons in their charge. Here again advice was sought by mail or occasionally by a visit to a hospital, but it was more difficult in those days than now to find transportation to take a patient many miles to see a physician at a hospital. Many judges and district attorneys make use of State hospital clinics for the study of persons brought before them for misconduct. This is especially true of children's courts. Some courts are already in position to obtain a psychiatric examination for every child whose case cannot be settled without it.

Closer relations are being developed in some communities between the hospitals and the departments of public health. One of the first moves in this direction was in New York State where, in 1910, the care of the mentally sick, pending commitment, was made a function of the local health officer. Several other States have proceeded some distance on this road of cooperation. Maryland may be mentioned, where the county health officer and the State hospital organization have close relations.

Every public hospital should be the center of community mental health activities for its district. This principle has been fully accepted in a large number of mental hospitals, but there are others, even in prosperous States, which have not grasped its importance. Health activity involves health education. Progressive institutions are prepared to send a physician or department head to tell intelligent lay bodies about the work of the institution and the ambitions of its staff. Authoritative addresses are delivered to civic and educational groups, to lawyers, clergymen, and social workers. Thus the community comes to understand better the matters that are within the province of the hospital. Some hospitals provide suitable reading matter for the families of patients so that the printed word may supplement the advice given by the physicians, and may, perhaps, constitute a saving of time to physicians.

Ambition has been voiced to make every relative of a patient a messenger of mental health, a not greatly exaggerated statement of the purpose of any good mental hospital.

Table 29 presents a list of the States in which one or more of the mental hospitals maintain regular out-patient clinics.

TABLE 29.—*States in which one or more of the mental hospitals maintain regular out-patient clinics*

California.	Maryland.	Oklahoma.
Colorado.	Massachusetts.	Pennsylvania.
Connecticut.	Michigan.	Rhode Island.
Delaware.	Minnesota.	South Carolina.
Illinois.	Missouri.	Utah.
Indiana.	Nebraska.	Vermont.
Iowa.	New Hampshire.	Washington.
Kansas.	New Jersey.	West Virginia.
Louisiana.	New York.	
Maine.	Ohio.	

The type of clinics maintained, as reported by questionnaire, varies widely in scope. A few of the fields covered are child guidance, diagnostic, follow-up of paroled patients, juvenile research, mental hygiene, neurologic, psychiatric, psychometric, neurosyphilitic, venereal.

Out-patient service is sometimes rendered several times a week. More often it is available bi-monthly or monthly. Many hospitals will give out-patient consultation upon request. It was assumed in compiling table 29 that those hospitals which did not reply to this question maintain no out-patient clinics.

XX. Family Care

Many mentally sick persons, though not recovered, have reached a level of conduct that enables them to live outside a hospital if accorded care and suitable supervision by the hospital social service, supplemented by medical advice at times. Suitable care becomes available when the hospital organizes the resources of its district by finding homes where patients may be boarded and where supervision will be welcome.

This type of treatment is relatively little employed in this country. The essential obstacle is the standard of living in the ordinary home. In Scotland and New York State, for instance, the cost of hospital care does not differ widely, but family care in Scotland costs only half as much as in New York. In New York State the maintenance rate in the hospitals averages about $5.50 per week. Family care costs as much, except for those patients who are able to do considerable useful work about the house.

However, the economic benefit to the State will not depend on getting a lower maintenance rate. The cost of building, equipping, and repairing more ward buildings is about $1 a day in addition to the maintenance rate. The State of New York could spend $1 a day for each patient in family care and still save $1. This fact is not everywhere understood.

Massachusetts was for many years the only State that maintained family care. Permissive legislation was passed in 1885 and operation began in 1904; prior to the recent depression the largest number thus placed was 403 in 1915. In 1932 the Province of Ontario and in 1933 the State of New York entered this field. In 1937 New York reported 580 patients thus placed, and Ontario 500. One hospital in Pennsylvania (Danville) has patients in family care.

Among patients, family care is popular. Most of those who have no home to go to or recognize that they do not get on well at home, prefer family life to hospital life. Family care is likely to increase the initiative of the patient and decrease his fretfulness and resentment.

As the term is used in Europe, a colony for the mentally ill is a village organization with patients boarding in many families rather than gathered into the better known and more closely regimented life of a mental hospital. The best known and perhaps the best developed colony in this sense is that of Gheel in Belgium. Not only the mentally sick find haven in this community but also many of the feebleminded who for any reason cannot remain in their own homes.

The only approximation to anything of this sort in the United States is a village in western New York where the Newark State School has placed about two score mental defectives of the higher grades. No mentally sick persons were included in this program.

XXI. Clinical Records

In some regards the clinical records in mental institutions must be more voluminous than in other hospitals in order to be adequate since a presentation of the development and aberrations of the human mind cannot be presented in statistical or graphic form as can the pulse and temperature. There is great variation in the adequacy of records. At least the more important parts are typewritten and in the better institutions clinical stenographers prepare all these documents carefully and attend to their filing. Though there are many variations in form and content, the general arrangement of material proceeds in much the same way in hospitals throughout the country.

As to statistics, the classification and tables advised by the American Psychiatric Association are generally used, especially since the United States Bureau of the Census employs many of these forms. There is wide variation in the extent to which statistical information is obtained and compiled. Indeed there are institutions in which it is doubtful just how many patients there are with some particular mental ailment, or with none.

XXII. Medical Library Facilities

The need of excellent library facilities has been recognized in many mental hospitals. Unfortunately there are some in which all initiative

in this matter has been left to the staff physician, whose salary is often meager, and the few books accumulated by such institutions are pathetic in their inadequacy and sometimes in their irrelevance to psychiatry. The better institutions have from a few hundred to several thousand volumes in the charge of a librarian. Where a trained librarian is not available, various plans have been employed to assure at least supervision of the volumes belonging to the hospital. The files of magazines also vary considerably. Medical libraries are reported in 147 State institutions.

TABLE 30.— *Medical library facilities*

Medical books	Number of hospitals	Medical books	Number of hospitals
0–99	15	1,500–2,999	7
100–199	22	3,000–6,999	2
200–299	26	7,000 and over	2
300–499	23	Inadequate	1
500–599	30	None	5
1,000–1,499	14	Not specified	22

XXIII. Medical Research

Medical research is needed in psychiatry quite as much as in any other field of medicine. It is carried on in many mental hospitals, sometimes sporadically and unostentatiously, in other places by special organizations with elaborate facilities and adequate financial backing. Institutions reporting active psychiatric research number 29. They are given in the following list:

Bellevue Psychiatric Hospital, New York.
Boston Psychopathic Hospital, Massachusetts.
Boston State Hospital, Massachusetts.
Central State Hospital, Indiana.
Cleveland State Hospital, Psychopathic Division, Ohio.
Colorado Psychopathic Hospital.
Columbus State Hospital, Ohio.
Cook County Psychiatric Department, Chicago, Illinois.
Elgin State Hospital, Illinois.
Henry Phipps Psychiatric Clinic, Baltimore, Maryland.
Illinois Psychiatric Institute.
Institute for Juvenile Research, Chicago, Illinois.
Institute of the Pennsylvania Hospital.
Institute for Psychoanalysis, Chicago, Illinois.
Iowa State Psychopathic Hospital.
Longview State Hospital, Ohio.
Massachusetts General Hospital, Psychiatric Department.
Menninger Clinic, Topeka, Kansas.
Michael Reese Hospital, Psychiatric Division, Chicago, Illinois.
Neuro-Psychiatric Institute, Hartford, Connecticut.
New York State Psychiatric Institute.
Spring Grove State Hospital, Maryland.
St. Elizabeths Hospital, Washington, D. C.

Syracuse Psychopathic Hospital, New York.
University of Pennsylvania, Psychiatric Department.
University of Toronto, Psychiatric Division.
Wisconsin Psychiatric Institute.
Worcester State Hospital, Massachusetts.
Yale University, Psychiatric Division, Connecticut.

In 1938 there were reported over 200 research studies under way or projected in the State mental hospitals. Their classification was as follows:

Subject classification	Number of studies
Clinical, neurological, and psychiatric	58
Clinical, convulsive disorders	6
Therapy (except those under next heading)	73
Psychotherapy, including medical psychology	11
Biochemistry and clinical laboratory	28
Neuroanatomy and neurophysiology	19
Constitutional, heredity, etc	7
Endocrine and vegetative nervous system	7
Administration and statistics	9
Psychiatric aspects of general medicine	1
Total	219

XXIV. Cost of Hospitalization

1. VALUATION OF MENTAL HOSPITALS

State mental hospitals representing 288,451 beds, or 83.5 percent of the total capacity, in 1933 reported a valuation of $480,000,000. A relative appraisal, therefore, of all similar hospitals would reach the sum of more than $570,000,000. However the replacement cost of these institutions is not known. In some institutions the same sum or less would provide quite as good structures, but many buildings are of a style that would not be acceptable to builders of this period and their replacement with fireproof construction would involve a much greater outlay than the appraisal value.

The veterans' hospitals have developed within the past 20 years, and their average cost per bed may be taken as approximately their replacement value.

2. ANNUAL MAINTENANCE COST

Mental disease is a tremendous economic problem; the cost of hospitalization, including overhead and charges on capital investment, exceeds $200,000,000 a year.

The annual cost of maintenance of State hospitals during 1938 was $109,586,885.75. Maintenance expenditures, exclusive of capital additions and of interest on capital expenditures, are presented on a per capita basis for each State in the following table.

TABLE 31.—*Per capita maintenance expenditures in State hospitals for mental disease, 1938*

Region and State	Total	Salaries and wages		Provisions		Fuel, light, and water		Other	
		Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
United States	$291.27	$151.65	52.1	$65.92	22.6	$23.03	7.9	$50.67	17.4
New England	379.38	209.16	55.1	75.06	19.8	35.11	9.3	60.05	15.8
Maine	287.42	142.65	49.6	62.36	21.7	33.89	11.8	48.51	16.9
New Hampshire	383.20	188.48	49.2	80.81	21.1	34.47	9.0	79.44	20.7
Vermont	284.66	140.70	49.4	56.30	19.8	30.75	10.8	56.91	20.0
Massachusetts	423.34	241.48	57.0	73.70	17.4	39.59	9.4	68.57	16.2
Rhode Island	276.82	128.20	46.3	44.63	16.1	47.43	17.1	56.57	20.4
Connecticut	336.39	185.83	55.2	95.71	28.5	19.01	5.7	35.84	10.7
Middle Atlantic	389.87	233.09	59.8	77.92	20.0	28.48	7.3	50.39	12.9
New York	406.74	245.63	60.4	83.45	20.5	29.17	7.2	48.48	11.9
New Jersey	387.96	231.82	59.8	62.63	16.1	30.88	8.0	62.63	16.1
Pennsylvania	313.82	176.42	56.2	62.96	20.1	23.63	7.5	50.80	16.2
East North Central	256.14	121.90	47.6	60.44	23.6	21.15	8.3	52.65	20.6
Ohio	207.18	89.14	43.0	46.84	22.6	20.48	9.9	50.72	24.5
Indiana	200.58	88.28	44.0	43.77	21.8	18.29	9.1	50.23	25.0
Illinois	261.86	129.24	49.4	68.25	26.1	20.75	7.9	43.62	16.7
Michigan	317.88	156.04	49.1	71.11	22.4	21.54	6.8	69.19	21.8
Wisconsin	481.89	249.55	51.8	76.92	16.0	41.15	8.5	114.27	23.7
West North Central	233.38	98.38	42.2	58.95	25.3	25.24	10.8	50.80	21.8
Minnesota	225.76	113.96	50.5	51.54	22.8	27.66	12.3	32.60	14.4
Iowa	194.19	72.31	37.2	46.54	24.0	28.38	14.6	46.96	24.2
Missouri	251.11	99.83	39.8	73.64	29.3	20.96	8.3	56.68	22.6
North Dakota	352.77	136.93	38.8	74.34	21.1	43.71	12.4	97.79	27.7
South Dakota	262.13	105.64	40.3	64.35	24.5	27.04	10.3	65.09	24.8
Nebraska	244.69	96.79	39.6	60.41	24.7	19.51	8.0	67.99	27.8
Kansas	209.38	83.60	39.9	58.22	27.8	19.81	9.5	47.74	22.8
South Atlantic (excluding District of Columbia)	215.15	84.10	39.1	63.31	29.4	16.39	7.6	51.34	23.9
Delaware	382.63	186.21	48.7	96.73	25.3	22.32	5.8	77.37	20.2
Maryland	246.50	106.44	43.2	57.63	23.4	24.42	9.9	58.01	23.5
Virginia	155.77	58.78	37.7	51.85	33.3	10.73	6.9	34.42	22.1
West Virginia	230.47	80.68	35.0	55.59	24.1	10.64	4.6	83.55	36.3
North Carolina	169.26	61.37	36.3	46.06	27.2	12.79	7.6	49.04	29.0
South Carolina	267.65	99.48	37.2	81.66	30.5	24.39	9.1	62.12	23.2
Georgia	199.08	80.53	40.5	78.66	39.5	7.13	3.6	32.77	16.5
Florida	279.40	104.19	37.3	75.13	26.9	32.48	11.6	67.60	24.2
District of Columbia	669.64	454.48	67.9	110.87	16.6	25.45	3.8	78.84	11.8
East South Central	156.03	59.59	38.2	46.40	29.7	14.61	9.4	35.42	22.7
Kentucky	130.14	52.15	40.1	41.47	31.9	12.04	9.3	24.48	18.8
Tennessee	175.89	57.67	32.8	64.94	36.9	15.63	8.9	37.64	21.4
Alabama	172.10	66.77	38.8	44.54	25.9	13.45	7.8	47.35	27.5
Mississippi	148.52	64.01	43.1	32.21	21.7	18.82	12.7	33.47	22.5
West South Central	221.75	82.60	37.2	63.94	28.8	15.90	7.2	59.31	26.7
Arkansas	211.34	73.49	34.8	70.77	33.5	27.51	13.0	39.57	18.7
Louisiana	200.51	82.51	41.2	58.31	29.1	11.28	5.6	48.41	24.1
Oklahoma	216.57	71.85	33.2	71.64	33.1	12.76	5.9	60.31	27.8
Texas	238.08	92.14	38.7	59.61	25.0	15.91	6.7	70.42	29.6
Mountain	242.12	115.50	47.7	54.51	22.5	21.83	9.0	50.27	20.8
Montana	192.97	80.45	41.7	55.16	28.6	16.61	8.6	40.75	21.1
Idaho	217.35	83.81	38.6	44.31	20.4	30.32	13.9	58.91	27.1
Wyoming	193.55	102.35	52.9	37.70	19.5	19.01	9.8	34.49	17.8
Colorado	269.05	137.00	50.9	62.36	23.2	20.80	7.7	48.88	18.2
New Mexico	253.49	95.06	37.5	57.03	22.5	25.35	10.0	76.05	30.0
Arizona	288.12	140.44	48.7	52.60	18.3	31.69	11.0	63.39	22.0
Utah	230.40	137.69	59.8	36.49	15.8	14.10	6.1	42.11	18.3
Nevada	268.04	100.30	37.4	78.60	29.3	34.94	13.0	54.20	20.2
Pacific	235.97	135.38	57.4	52.88	22.4	15.02	6.4	32.70	13.9
Washington	234.66	119.14	50.8	63.81	27.2	20.92	8.9	30.79	13.1
Oregon	174.75	79.44	45.5	54.07	19.5	14.29	8.2	46.95	26.9
California	247.41	150.07	60.7	53.19	21.5	13.49	5.5	30.66	12.4

In the State hospitals of the country as a whole the per capita expenditure for maintenance was $291.27 in 1938. Among individual States the expenditures range from a maximum of $423.34 in Massachusetts to a minimum of $130.14 in Kentucky. In Wisconsin, where the expenditure in State hospitals alone is only part of the total expenditure for patients in mental institutions, the data cannot be considered on a comparative basis. In the District of Columbia the maintenance expenditure per capita is $669.64, more than twice as high as in State hospitals of the country.

The proportion of total expenditures devoted to salaries and wages constitutes a little more than half. There is considerable variation among the States. In those States in which better care is given to the mentally ill, the percentage is higher. The expenditures devoted to salaries and wages vary from $245.63 in New York to $52.15 in Kentucky. Twenty-three States spend less than $100 per capita for salaries and wages.

The amounts devoted to provisions in each State do not vary so widely as for salaries and wages. The reported variation may be influenced by the quantity of produce raised on hospital grounds. Another factor causing variation is that the amount spent for food, though computed on a per capita patient basis, in many hospitals also covers the cost of food for employees.

3. DAILY PER CAPITA COSTS

Reports from State hospitals indicate an average daily per capita cost of 80 cents. St. Elizabeths Hospital in the District of Columbia averages $1.83 daily. Federal expenditures are higher than those of the States and higher also than expenditures in city and county hospitals. Eloise Hospital in Michigan, and Milwaukee County Hospital, Wisconsin, have been found in previous studies to devote more to maintenance than is the case in the State hospitals of their respective States.

Psychiatric departments of general hospitals usually share in the maintenance of the complete hospital service, and have, therefore, a higher per capita cost.

4. SOURCES OF INCOME

Far the largest part of the cost of maintenance comes from appropriations by the government, State, or municipality. A minority of patients, but still a considerable number, reimburse in whole or in part for their maintenance. These monies are not an increment to the hospital appropriation but are paid directly to the State treasury. A very few public hospitals have an income from trust funds set up in previous years by friends of the patients.

XXV. Group Classifications

1. FEDERAL HOSPITALS

Most of the Federal hospitals are maintained by the Veterans Administration. The number of patients is gradually increasing, and the peak load is not expected before 1952. Many patients admitted to veterans' hospitals are received for diagnosis and temporary care only. St. Elizabeths Hospital in the District of Columbia was maintained by the Department of the Interior during the period of this survey. With the growth of the District and of the Federal services, it serves an increasing population.

Treatment facilities in all the Federal hospitals are of high quality. The ratio of assistant physicians to patients in the veterans' hospitals is 1:96.7. They employ 932 graduate nurses, the ratio being 1:29.1, and the ratio of total nursing personnel (nurses and attendants) to patients is 1:5.2. The total number of physicians is 280, nurses and attendants, 4,240. The total personnel number 9,749, with a ratio of 1:2.8; this figure does not include personnel connected with outpatient clinics.

In St. Elizabeths Hospital, the ratio of assistant physicians to patients is 1:121, of nursing personnel to patients 1:5.1, and of graduate nurses 1:59.3. The total number of assistant physicians is 48, nurses and attendants, 1,148, and the total number of employees is 1,795, with a resultant ratio of 1:3.2.

2. STATE HOSPITALS

There are 180 State hospitals. They employ 1,519 assistant physicians, a ratio of 1:248.0 patients, and 4,063 graduate nurses, a ratio of 1:93 patients. Nurses and attendants number 40,344.5, a ratio of 1:9.3, and the total personnel number 65,167, a ratio of 1:5.8.

XXVI. Comparison with Standards of the American Psychiatric Association

1. The chief executive officer must be a well-qualified physician and experienced psychiatrist whose appointment and removal shall not be controlled by partisan politics.

From State to State there is very great difference in the acceptance of these fundamental principles. In some commonwealths the occurrence of a vacancy in a superintendency is the occasion for a careful search among available men for the one best equipped to undertake the important task. In other States the chief qualification is that one is so closely related to some skillful partisan politician that he can be depended on to favor the interests of the party.

Generally, the chief executive officer is a well-qualified physician. There are places where the importance of special psychiatric training seems not to be recognized. In a very small number of institutions

the head is a layman and the ranking physician is subordinate to him, though ordinarily not subject to interference in what are rated as purely medical matters, especially if they be questions of general medicine or surgery rather than of psychiatry.

2. All other persons employed at the institution ought to be subordinate to him and subject to removal by him if they fail to discharge their duties properly.

Subordination depends somewhat on the extent of political interference; where political control exists, the head of the institution may have to get political approval of all sorts of acts, both professsional and administrative. There is another way also in which administrative splitting is created. In some sections it is thought that the board controlling the hospital (or perhaps a group of hospitals) does best to appoint the stewards. Under such an arrangement there is coordinate authority. It seldom works very well; many frictions arise.

3. The positions and administration of the institution must be free from control for the purpose of partisan politics.

A measure of partisan political control is exercised in [illegible]nsiderable number of institutions. In the most important commo[illegible]alths any attempt at such subversion causes weighty protest.

4. There must be an adequate medical staff of well qualified physicians, the proportion to total patients to be not less than 1 to 150 in addition to the superintendent, and to the number of patients admitted annually not less than 1 to 40. There must be one or more full time dentists.

Unhappily there have been few hospitals that meet this supposedly minimal ratio. Delaware has this or a somewhat better ratio of patients to physicians.

Dental service is usually good. There are still institutions that depend on part-time attention; there are other hospitals where the dental service is distinctly superior to the medical, usually because of the interest taken by the State dental organization.

5. There must be a staff of consulting specialists at least in internal medicine, general surgery, organic neurology, diseases of the eye, ear, nose and throat, and radiology, employed under such terms as will ensure adequate services. A record of their visits must be kept.

Consulting staffs are generally employed, and many hospitals have a few attending specialists who make stated visits, perhaps see all new patients and others that are referred. In some sections of the country there are very few specialists better equipped than the resident staff of the mental hospital. Usually a general surgeon and an ophthalmologist can be engaged on some basis. In at least one hospital the outside staff is organized along the lines recommended by the American College of Surgeons for general hospitals, and their monthly meeting is an important function in the life of the hospital.

6. The medical staff must be organized, the services well-defined, and the clinical work under the direction of a staff leader or clinical director.

The medical staff is usually organized. In the small hospitals the superintendent or the next ranking physician is responsible for the clinical work. In larger hospitals the organization is more elaborate, perhaps one physician being assigned to the laboratory, one to out-patient work and others to special activities in addition to their regular clinical work. There are other institutions where the individual physician is left largely to his own discretion—a system that is very complimentary to the young physician, but not nearly so good for the patient.

7. Each medical service must be provided with an office and an examining room, containing suitable conveniences and equipment for the work to be performed, and with such clerical help specially assigned to the service as may be required for the keeping of the medical and administrative records.

There are still hospitals, some in prosperous States, where all physicians have occupancy of a common office or of adjoining rooms in the administrative center. In such institutions the provisions for the examination of patients on the various services may be poor. Clerical help is not always adequate.

8. There must be carefully kept clinical histories of all the patients, in proper files for ready reference on each service.

Clinical records are compiled everywhere but it is stated that in some institutions only a few years ago nothing except an admission entry was made. Records now kept vary greatly as to their value and adequacy. It is the universal custom to file them in or near the administrative center. Many institutions have not yet worked out a scheme by which the original record or a copy of it may be available on the service where the patient is.

9. Statistical data relating to each patient must be recorded in accordance with the standard system adopted by the Association.

Statistical data have been for some years collected in accordance with the system adopted by this Association. There is wide variation in the amount of statistical material accumulated, but the same tables are now in use everywhere.

10. The patients must be classified in accordance with their mental and physical condition, and with adequate provision for the special requirements for the study and treatment of the cases in each class, and the hospital must not be so crowded as to prevent adequate classification and treatment.

There is considerable variation in the effectiveness of the classification of patients. In a few institutions one finds incoherent groups. In the better hospitals matters are arranged so that the different groups can still be as comfortable as possible, and those who require more attention will be in wards with larger personnel. Unfortunately in many institutions overcrowding seriously interferes with classification and also with treatment.

11. The classification must include a separate reception and intensive study and treatment department or building, a special unit for acute physical illnesses and surgical conditions, and separate units for the tuberculous and the infirm and bed-fast. Each of these units must be suitably organized and equipped for the requirements of the class of patients under treatment.

Many institutions receive new patients in a separate building, perhaps separated somewhat from the rest of the plant. Accommodations range from this to places where the new patient goes into a ward already occupied by a considerable number of long-resident patients.

Special units for the physically ill are quite generally found, not necessarily in separate buildings, but with special accommodations and usually adequate apparatus to make the work of the nurse convenient. In many instances the accommodations for those with acute physical illness have been amalgamated with the provision for the new patient so that he comes at once into an atmosphere of physical sickness.

Separate units for tuberculosis are usual. Some of them are very fine, and equipped with all facilities for modern treatment. Many are custodial units and in some places not even a porch is provided for these patients. It is fairly common for the most disturbed patients, and therefore the most dangerous to the health of others, to be accommodated in some other ward than the one where other tuberculosis cases are kept.

12. The hospital must be provided with a clinical and pathological laboratory, equipped and manned in accordance with the minimum standards recommended by the Committee on Pathological Investigation.

Good laboratories for clinical pathology are now the rule rather than the exception. The development of courses in medical technology in the universities has insured a supply of able technicians. Occasionally such an aide works without even having medical supervision.

Neuropathological work is much less frequently done in the hospitals, since most of them have no staff member who has been trained in this field.

13. The hospital must be provided with adequate X-ray equipment and employ a well qualified radiologist.

Adequate X-ray equipment is usually found, though not universally. There is usually a technician who has been trained to take good pictures. Many institutions have no excuse for employing a full-time radiologist, and some member of the medical staff, either resident or consultant, gives part-time to this work, a quite satisfactory arrangement and in accordance with this recommendation.

14. There must be a working medical library and journal file.

There are some very fine medical libraries in American mental hospitals; on the other hand there are many institutions with very inadequate medical libraries. Every mental hospital has at least one or two psychiatric journals available, and some have many more.

15. The treatment facilities and equipment must include:
   (*a*) A fully equipped surgical operating room.
   (*b*) A dental office supplied with modern dental equipment.
   (*c*) Tubs and other essential equipment for hydrotherapy operated by one or more specially trained physiotherapists.
   (*d*) Adequately equipped examination rooms for the specialties in medicine and surgery required by the schedule.
   (*e*) Provision for occupational therapy and the employment of specially trained instructors.
   (*f*) Provision for treatment by physical exercises and games and the employment of specially trained instructors.
   (*g*) Adequate provision for recreation and social entertainment.

(*a*) A surgical operating room is usually found, and equipment ranges from fair to excellent.

(*b*) Dental offices ordinarily are quite well equipped.

(*c*) Tubs for the prolonged bath are found in almost all American institutions, and persons with at least adequate experience are usually in charge. There are many institutions where the tub can be used only during limited hours of the daytime. Apparatus for giving stimulating douches has been installed in most institutions, sometimes on a scale that is out of proportion to the amount of use that the apparatus receives. Many such hospitals do not have on their staff anyone who is conversant with the best techniques in physiotherapy.

(*d*) There are usually rooms that do for the examination by specialists. The better hospitals have what is called a diagnostic clinic, and in it are several examining rooms and all necessary equipment.

(*e*) Provision for occupational therapy is found everywhere. In many institutions it is far below the needs of the patients. The term is given to a very great range of work, and some departments of occupational therapy are merely the factories in which the mentally sick make their contribution towards the support of the commonwealth.

(*f*) Provision is not made everywhere for treatment by physical exercises and games. In some institutions where these methods are provided, someone else than a specially trained instructor is in charge.

(*g*) Most institutions have adequate provision for recreation and social entertainment. There are still a very few where the moving picture is not always available.

16. Regular staff conferences must be held at least twice a week where the work of the physicians and the examination and treatment of the patients will be carefully reviewed. Minutes of the conference must be kept.

Regular staff conferences are held from two to six days a week. These are mostly diagnostic, and other matters receive attention also. Minutes are kept, often meticulously.

17. There must be one or more out-patient clinics conducted by the hospital in addition to any on the hospital premises. An adequate force of trained social workers must be employed.

Out-patient departments are unknown in some States. There are institutions where even a single social worker would be a welcome addition. Those who are called social workers are not always trained persons.

18. There must be an adequate nursing force, in the proportion to total patients of not less than 1 to 8, and to the patients of intensive treatment and acute sick and surgical units of not less than 1 to 4. Provision must be made for adequate systematic instruction and training of the members of the nursing force.

The competence of the nursing force in numbers is often very low. Few institutions employed ward personnel in the ratio of 1 to 8 patients until the shorter workday was adopted. While some institutions give excellent training to their employees, others pay little attention to this matter.

19. Mechanical restraint and seclusion, if used at all, must be under strict regulations, and a system of control and record by the physicians, and must be limited to the most urgent conditions.

Mechanical restraint and seclusion are everywhere supposed to be under the control of the physician, but, in fact, in many places these measures of control are prescribed as well as applied by the nursing personnel.

The history of the mental hospitals discloses forces that have been favorable to the development of good institutions, well planned, well staffed, well equipped, and diligently operated for the benefit of the patients, and other forces that have worked against such ends. Favorable influences have been a good general standard of public service; a reasonable amount of public and private wealth in the community; institutional boards composed largely of prominent citizens not interested in personal gain; a general community attitude of sympathy towards human distress; the active interest of the medical profession; a disposition to consider the problems of sick people as outside the realm of partisan politics; the choice of a strong man as a superintendent during the developmental period of the hospital; the maintenance of good public relations throughout the history of the institution; and the stimulus to progress of private institutions maintaining good standards. Aside from the absence of these constructive elements, some forces that have worked against the development and maintenance of proper standards are: A public callous to human needs; general poverty; the disposition to permit personal or party

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aggrandizement at the expense of the mentally sick; inability to distinguish between penal and custodial problems in the case of restless, difficult citizens; inability to start an institution with a strong administration; a financial situation in which crude, ill-trained persons must be called on to do work that should be of high grade; and isolation of institutions from social activities and currents of scientific thought.

The present is a time when there appears to be an increasing interest in the problems of mental disease both inside and outside the mental hospitals. It is hoped that this general interest will be fostered, and then employed for the benefit of the mental patients in every community.

XXVII. Summary, by States

Selected patient data for each of the State hospitals are presented in table 32. From this table and from the State summaries which follow, a more integrated picture of each hospital and State may be gained.

TABLE 32.—*Summary data for State hospitals for mental disease, by hospital, 1938*

TABLE 32.—*Summary data for State hospitals for mental disease, by hospital, 1938*

Hospital, by region and State	Resident patients	First admissions	Turnover rate[1]	Voluntary admissions		Ratio of patients to assistant physicians	Ratio of patients to nurses and attendants	Percent of graduate nurses on total nursing staff	Discharge rate per 1,000 under treatment	Death rate per 1,000 under treatment	Percent of deaths autopsied	Replacement rate[2]	Total per capita maintenance expenditure	Percent of total maintenance expenditures devoted to salaries and wages
				Number	Percent of total admissions									
United States	382,155	80,999	21.2	7,195	7.2	248.0	9.3	10.1	125.0	65.1	19.3	112.7	$290.93	52.1
NEW ENGLAND														
Maine	2,681	482	18.0	29	4.8	329.1	9.5	11.9	94.1	67.5	6.0	117.2	287.42	49.6
Augusta State Hospital, Augusta	1,538	220	14.3	2	.7	373.3	9.4	12.7	76.4	53.2	13.8	126.2	278.91	51.9
Bangor State Hospital, Bangor	1,143	262	22.9	27	8.5	285.0	9.6	10.9	116.0	85.3	(3)	110.1	298.55	46.8
New Hampshire:														
New Hampshire State Hospital, Concord	2,136	448	21.0	95	15.8	209.1	6.6	14.2	119.8	65.6	18.6	123.7	383.20	49.2
Vermont:														
Vermont State Hospital, Waterbury	1,073	241	22.5	15	4.3	263.5	8.9	16.9	171.4	62.1	2.3	105.8	284.66	49.4
Massachusetts	21,233	3,745	17.6	61	1.2	197.2	7.0	15.6	129.8	59.8	41.1	101.9	423.34	57.0
Boston State Hospital, Boston	2,299	651	28.3	7	.8	134.6	6.2	13.3	221.8	73.8	37.3	95.6	467.17	57.7
Bridgewater State Hospital, State Farm	895	61	6.8			298.3	7.0	3.1	101.6	31.9	(3)	75.4	(4)	(4)
Danvers State Hospital, Hathorne	2,352	676	28.7	14	1.5	212.2	6.8	13.2	198.8	84.1	53.3	101.4	391.35	54.2
Foxboro State Hospital, Foxboro	1,426	222	15.6	3	1.0	194.3	8.4	11.8	89.3	50.1	44.6	125.1	424.45	57.5
Gardner State Hospital, Gardner	1,424	94	6.6	3	2.2	200.7	7.8	30.2	66.5	48.5	34.6	74.1	440.99	52.1
Grafton State Hospital, North Grafton	1,535	96	6.3			183.4	7.1	22.2	43.9	44.5	20.0	110.7	469.70	59.5
Medfield State Hospital, Medfield	1,812	125	6.9			310.8	7.7	10.4	63.3	47.6	35.1	83.6	393.53	58.6
Metropolitan State Hospital, Waltham	1,864					256.6	7.0	13.3	26.2	16.4	75.0		406.10	52.4
Northampton State Hospital, Northampton	2,020	457	22.6	5	.8	198.5	8.1	7.7	140.3	65.6	36.5	121.0	379.92	55.6
Taunton State Hospital, Taunton	1,693	420	24.8	4	.7	188.0	6.4	14.0	161.9	74.8	44.0	103.4	406.13	58.1
Westborough State Hospital, Westborough	1,564	401	25.6	14	2.5	169.0	6.7	16.3	168.0	72.4	22.1	115.4	448.62	58.9
Worcester State Hospital, Worcester	2,349	542	23.1	11	1.5	196.3	6.1	25.6	156.4	70.1	50.2	107.6	431.41	61.1
Rhode Island:														
State Hospital for Mental Diseases, Howard	2,699	504	18.7	19	3.1	218.1	8.3	10.5	68.9	77.5	43.3	133.7	276.82	46.3
Connecticut	7,297	1,343	18.4	28	1.6	205.9	7.1	9.9	122.4	67.8	12.1	99.1	336.39	55.2
Connecticut State Hospital, Middletown	3,462	688	19.9	18	1.9	216.3	6.2	13.6	137.0	72.2	20.9	100.4	353.45	56.4
Fairfield State Hospital, Newton	931					184.2	11.0	8.3	42.1	25.1	32.0		367.94	51.4
Norwich State Hospital, Norwich	2,904	655	22.6	10	1.3	202.7	7.4	5.4	126.8	74.3	(3)	106.6	308.64	55.3

See footnotes at end of table.

TABLE 32.—*Summary data for State hospitals for mental disease, by hospital, 1938*—Continued

Hospital, by region and State	Resident patients	First admissions	Turnover rate	Voluntary admissions		Ratio of patients to assistant physicians	Ratio of patients to nurses and attendants	Percent of graduate nurses on total nursing staff	Discharge rate per 1,000 under treatment	Death rate per 1,000 under treatment	Percent of deaths autopsied	Replacement rate	Total per capita maintenance expenditure	Percent of total maintenance expenditures devoted to salaries and wages
				Number	Percent of total admissions									
MIDDLE ATLANTIC														
New York	70,878	12,805	18.1	902	5.6	181.8	6.3	12.6	108.6	66.0	28.2	108.5	$406.74	60.4
Binghamton State Hospital, Binghamton	2,778	396	14.3	50	9.5	184.3	5.8	11.5	93.7	56.0	51.9	107.4	445.19	59.7
Brooklyn State Hospital, Brooklyn	2,148	1,626	75.7	43	2.1	95.0	4.4	20.6	339.1	134.0	20.3	105.5	573.58	57.6
Buffalo State Hospital, Buffalo	2,461	443	18.0	57	10.4	159.1	7.1	19.5	111.9	50.7	20.8	114.2	427.96	62.4
Central Islip State Hospital, Central Islip	6,939	1,113	16.0	13	.9	190.0	7.5	11.0	91.7	46.3	36.2	131.7	359.92	59.4
Creedmoor State Hospital, Queens Village	4,286	762	17.8	3	.3	214.2	6.8	8.5	64.4	59.6	26.7	142.1	358.14	57.8
Dannemora State Hospital, Dannemora	1,029	106	10.3			198.0	5.1		53.6	11.8	23.1	194.4	517.90	62.5
Gowanda State Hospital, Helmuth	2,412	380	15.8	114	24.4	167.2	6.4	15.8	94.7	65.1	56.1	102.0	425.58	61.8
Harlem Valley State Hospital, Wingdale	4,702	372	7.9	36	7.2	237.0	6.7	8.9	67.2	50.3	10.8	79.7	350.75	58.0
Hudson River State Hospital, Poughkeepsie	4,411	462	10.5	51	7.7	178.3	6.5	16.7	68.6	61.3	34.1	100.8	438.25	61.0
Kings Park State Hospital, Kings Park	5,357	542	10.1	20	2.4	175.5	7.3	11.7	132.9	43.8	33.7	71.0	402.32	63.6
Manhattan State Hospital, New York City	3,318	2,236	67.4	24	.9	144.3	5.9	15.1	230.0	148.1	9.4	128.2	483.01	63.6
Marcy State Hospital, Marcy	2,384	450	18.9	102	17.5	168.7	6.9	12.6	113.2	76.2	16.5	104.7	455.30	60.9
Matteawan State Hospital, Beacon	1,425	88	6.2			202.1	3.3	.9	45.0	25.4	48.7	113.9	709.63	66.8
Middletown State Hospital, Middletown	3,221	280	8.7	36	9.7	170.7	5.4	14.6	59.4	59.4	43.3	85.9	415.09	61.3
Pilgrim State Hospital, Brentwood	8,549	741	8.7	9	1.0	227.1	6.7	3.9	62.1	64.0	43.3	74.0	325.06	55.7
Rochester State Hospital, Rochester	3,116	448	14.4	34	6.3	208.0	7.1	26.4	73.7	78.4	25.0	97.1	363.97	59.4
Rockland State Hospital, Orangeburg	5,567	1,227	22.0	85	5.2	168.6	5.3	14.1	122.4	45.3	16.2	145.2	363.42	58.9
St. Lawrence State Hospital, Ogdensburg	2,160	307	14.2	62	16.8	166.6	6.3	18.6	62.7	69.5	45.1	112.2	466.74	59.7
Utica State Hospital, Utica	1,689	490	29.0	121	20.3	138.9	6.3	20.8	159.7	76.0	48.8	114.2	483.22	64.1
Willard State Hospital, Willard	2,926	336	11.5	42	9.9	243.8	6.5	18.1	68.0	66.3	13.8	93.8	399.00	63.0
New Jersey	10,451	2,278	21.8	501	17.4	165.2	8.4	13.0	126.4	74.5	24.7	109.4	387.96	59.8
New Jersey State Hospital, Greystone Park	5,362	1,183	22.1	195	13.7	171.9	9.0	11.3	123.3	82.2	57.1	102.7	358.56	57.0
New Jersey State Hospital, Marlboro	2,212	555	25.1	155	22.0	121.6	9.4	19.2	130.7	73.1	17.3	124.6	363.67	59.0
New Jersey State Hospital, Trenton	2,877	540	18.8	151	20.3	206.3	7.1	11.8	129.0	60.8	13.4	110.4	460.60	64.1
Pennsylvania	15,416	2,177	14.1	202	7.6	211.3	9.5	18.9	103.5	55.1	24.4	94.1	313.82	56.2
Allentown State Hospital, Allentown	1,625	257	15.8	8	2.4	201.8	8.9	22.7	137.8	44.8	29.2	91.7	330.09	54.5
Danville State Hospital, Danville	1,926	377	19.6	154	32.1	161.4	7.4	40.3	141.8	55.0	21.2	101.7	341.34	64.3
Farview State Hospital, Waymart	859	52	6.1			121.4	9.6	3.4	17.6	37.4	11.8	122.0	369.95	68.4

Errata: Table 32, Page 92, Column "Percent of Deaths Autopsied," lines 6 and 7 from the bottom of page. Should be reversed so as to read "New Jersey State Hospital, Greystone Park '17.3'" and "New Jersey State Hospital, Marlboro '57.1'."

Harrisburg State Hospital, Harrisburg	2,003	242	12.1			664.3	9.7	7.8	73.1	49.5	36.3	110.0	296.69	51.8

Harrisburg State Hospital, Harrisburg	2,003	242	12.1	-------	-------	664.3	9.7	7.8	73.1	49.5	36.3	110.0	296.69	51.8
Norristown State Hospital, Norristown	3,543	269	7.6	-------	-------	183.9	10.6	12.7	65.9	53.4	40.5	76.3	299.51	52.6
Torrance State Hospital, Torrance	1,688	302	17.9	1	.3	203.5	7.4	13.6	209.4	46.3	2.9	65.9	311.79	53.8
Warren State Hospital, Warren	2,306	490	21.2	12	2.1	204.5	11.7	24.9	72.9	86.4	21.5	129.1	310.72	54.7
Wernersville State Hospital, Wernersville	1,466	188	12.8	27	11.3	361.0	11.6	14.5	93.0	49.7	7.1	98.4	391.20	57.2
EAST NORTH CENTRAL														
Ohio	17,824	3,314	18.6	39	1.0	381.0	15.5	17.8	134.3	57.0	21.2	91.2	207.18	43.0
Athens State Hospital, Athens	1,721	263	15.3	2	.7	432.3	15.2	30.7	100.8	52.6	(3)	98.4	201.69	48.4
Cleveland State Hospital, Cleveland	2,285	428	18.7	-------	-------	375.6	15.9	20.6	277.5	38.6	22.5	47.3	208.36	47.7
Columbus State Hospital, Columbus	2,554	465	18.2	-------	-------	295.4	11.7	10.2	74.4	74.4	32.8	83.9	193.17	46.2
Dayton State Hospital, Dayton	1,715	406	23.7	1	.2	343.2	17.0	30.7	131.7	73.2	10.8	109.3	185.27	46.3
Lima State Hospital, Lima	1,161	65	5.6	-------	-------	1,167.0	14.8	3.8	90.4	27.4	13.9	54.8	325.32	41.0
Longview State Hospital, Cincinnati	2,503	470	18.8	-------	-------	281.1	16.8	17.9	100.5	58.2	30.1	114.6	254.10	37.7
Massillon State Hospital, Massillon	3,173	648	20.4	36	5.0	448.3	15.0	5.3	108.0	52.4	18.2	119.6	165.38	39.1
Toledo State Hospital, Toledo	2,712	569	21.0	-------	-------	453.2	20.4	34.6	96.0	67.0	22.6	125.8	191.20	41.4
Indiana	8,426	1,705	20.2	2	.1	282.2	12.9	1.0	90.8	7.5	12.3	124.0	200.58	44.0
Central State Hospital, Indianapolis	1,962	562	28.6	-------	-------	392.4	11.5	-------	101.0	66.6	38.9	158.0	218.25	42.3
Evansville State Hospital, Evansville	1,299	321	24.7	-------	-------	230.4	12.7	7.0	116.4	92.0	(3)	107.9	189.86	42.4
Indiana Hospital for Insane Criminals, Michigan City	279	18	6.5	-------	-------	138.0	19.7	-------	30.6	20.4	(3)	133.3	(4)	(4)
Logansport State Hospital, Logansport	1,814	286	15.8	1	.3	216.0	14.8	1.7	70.0	60.9	16.5	126.7	179.47	48.3
Madison State Hospital, North Madison	1,682	260	15.5	1	.3	334.6	12.8	.8	82.5	60.6	(3)	108.5	185.68	43.7
Richmond State Hospital, Richmond	1,390	258	18.6	-------	-------	348.0	12.5	-------	97.7	68.9	.9	107.9	216.65	43.5
Illinois	29,468	7,318	24.8	2,432	25.2	223.8	9.6	8.0	153.4	72.4	10.6	112.5	216.86	49.4
Alton State Hospital, Alton	1,552	383	24.7	101	20.3	299.6	8.5	11.9	124.5	76.7	(3)	127.4	263.10	52.3
Anna State Hospital, Anna	2,180	552	25.3	207	29.3	243.9	8.2	7.1	148.9	94.4	5.1	100.7	265.08	50.7
Chicago State Hospital, Chicago	4,478	1,178	26.3	10	.7	209.5	11.9	7.0	127.7	110.0	1.7	101.2	236.26	49.6
East Moline State Hospital, East Moline	2,141	628	29.3	472	54.5	237.0	8.3	10.2	204.0	71.7	(5)	106.3	268.64	50.6
Elgin State Hospital, Elgin	4,436	1,181	26.6	485	29.6	174.2	11.4	7.6	227.4	55.3	34.5	93.8	256.56	53.2
Illinois Security Hospital, Menard	450	34	7.6	-------	-------	449.0	9.0	-------	31.6	19.0	(3)	245.8	290.36	60.0
Jacksonville State Hospital, Jacksonville	3,257	638	19.6	316	35.6	268.4	11.3	11.5	133.4	72.4	5.1	105.1	318.91	48.1
Kankakee State Hospital, Kankakee	3,799	476	12.5	177	23.8	222.1	9.8	7.6	169.2	53.8	30.4	68.3	271.04	44.7
Manteno State Hospital, Manteno	4,668	1,687	36.1	206	10.4	215.9	7.0	2.3	77.7	52.4	8.2	283.1	238.92	49.6
Peoria State Hospital, Peoria	2,507	561	22.4	458	52.0	257.5	9.8	15.6	177.4	83.7	10.6	99.4	250.00	45.4
Michigan	11,568	2,331	20.2	17	.6	303.5	8.4	6.8	171.3	50.2	20.8	99.6	317.88	49.1
Ionia State Hospital, Ionia	909	76	8.4	-------	-------	304.0	10.9	-------	91.5	32.8	(3)	71.3	308.92	48.0
Kalamazoo State Hospital, Kalamazoo	2,752	341	12.4	-------	-------	344.4	7.8	8.5	203.6	53.2	6.6	108.8	317.99	48.2
Newberry State Hospital, Newberry	1,302	234	18.0	4	1.4	329.0	7.9	3.0	110.3	64.6	16.7	107.2	288.58	44.2
Pontiac State Hospital, Pontiac	1,807	259	14.3	1	.3	363.4	9.6	1.6	113.0	43.4	31.2	89.9	348.59	49.7
Traverse City State Hospital, Traverse City	2,366	332	14.0	11	2.9	260.7	8.9	3.4	162.7	58.3	29.9	57.1	345.24	49.9
Ypsilanti State Hospital, Ypsilanti	2,432	1,089	44.8	1	.1	260.3	7.5	15.5	233.9	42.5	30.1	131.4	288.52	52.2
Wisconsin	2,067	1,148	55.5	543	30.8	175.1	6.2	6.8	347.1	57.6	14.0	130.5	481.89	51.8
Central State Hospital for Insane, Waupun	310	57	18.4	-------	-------	161.0	6.2	1.9	219.5	7.5	(3)	75.8	562.93	61.6
Mendota State Hospital, Mendota	871	518	59.5	407	46.9	178.2	7.0	6.3	364.1	77.6	(3)	126.0	452.79	44.8
Winnebago State Hospital, Winnebago	886	573	64.7	136	15.2	177.6	5.6	8.9	363.3	50.3	36.8	143.4	481.70	54.2

See footnotes at end of table.

TABLE 32.—*Summary data for State hospitals for mental disease, by hospital, 1938*—Continued

Hospital, by region and State	Resident patients	First admissions	Turnover rate	Voluntary admissions		Ratio of patients to assistant physicians	Ratio of patients to nurses and attendants	Percent of graduate nurses on total nursing staff	Discharge rate per 1,000 under treatment	Death rate per 1,000 under treatment	Percent of deaths autopsied	Replacement rate	Total per capita maintenance expenditure	Percent of total maintenance expenditures devoted to salaries and wages
				Number	Percent of total admissions									
WEST NORTH CENTRAL														
Minnesota	9,879	2,005	20.3	349	15.1	454.7	13.9	19.7	123.0	54.5	22.2	108.2	$225.76	50.5
Anoka State Hospital, Anoka	1,452	13	.9	1	6.7	729.5	17.8	18.3	4.6	45.8	1.4	19.5	146.20	42.4
Fergus Falls State Hospital, Fergus Falls	1,855	567	30.6	68	10.2	405.6	18.4	33.6	229.3	63.0	18.2	86.8	211.80	54.3
Hastings State Hospital, Hastings	1,076					1,090.0	8.1	.7	20.0	45.2	(3)		222.04	43.1
Moose Lake State Hospital, Moose Lake	301	141	46.8	43	30.5	245.0	4.0	29.0	27.9	40.2	30.8	640.9	1,020.41	40.0
Rochester State Hospital, Rochester	1,594	485	30.4	62	10.9	391.8	10.4	22.0	236.2	50.6	45.1	88.9	232.48	53.5
St. Peter State Hospital, St. Peter	2,170	575	26.5	139	21.1	309.1	24.0	37.8	93.7	72.6	15.3	152.0	249.92	56.9
Willmar State Hospital, Willmar	1,431	224	15.7	36	14.0	725.0	15.9	4.4	42.0	33.6	57.7	219.7	150.56	49.8
Iowa	6,756	1,234	18.3			347.8	16.4	12.1	94.2	60.2	2.1	124.9	194.19	37.2
Cherokee State Hospital, Cherokee	1,675	307	18.3			334.2	11.9	10.7	16.3	43.6	5.4	87.2	188.75	41.2
Clarinda State Hospital, Clarinda	1,702	350	20.6			418.0	18.8	10.1	32.1	73.1	2.2	250.5	174.25	36.3
Independence State Hospital, Independence	1,784	303	17.0			296.5	16.5	19.4	.9	75.0	1.4	220.9	179.56	36.0
Insane Department Men's Reformatory, Anamosa	84	14	16.7						105.3	10.5	(3)	172.7	437.47	68.1
Mt. Pleasant State Hospital, Mt. Pleasant	1,511	260	17.2			371.8	22.2	6.0	170.4	53.9	(3)	68.2	226.16	32.1
Missouri	8,257	2,034	24.6	6	.3	268.7	12.1	5.3	137.1	67.0	25.9	112.6	251.11	39.8
State Hospital No. 1, Fulton	2,260	551	24.4			310.6	10.0	4.1	108.1	66.5	19.8	129.5	270.32	41.4
State Hospital No. 2, St. Joseph	2,621	559	21.3			234.5	12.5	4.8	168.6	64.1	42.9	84.9	241.27	36.6
State Hospital No. 3, Nevada	1,820	441	24.2			302.3	14.0	3.1	113.7	74.9	18.5	117.3	238.20	40.5
State Hospital No. 4, Farmington	1,556	483	31.0	6	1.0	249.0	13.7	11.0	149.2	63.7	15.1	141.1	255.84	41.5
North Dakota:														
North Dakota State Hospital for Insane, Jamestown	1,862	380	20.4			259.7	9.7	8.0	115.6	56.5	37.0	116.3	352.77	38.8
South Dakota:														
Yankton State Hospital, Yankton	1,621	285	17.6	12	3.2	270.5	12.8	3.1	133.6	52.2	14.4	102.4	262.13	40.3
Nebraska	3,884	619	15.9			213.8	11.0	8.3	85.6	50.7	30.7	118.4	244.69	39.6
Hastings State Hospital, Ingleside	1,608	305	19.0			175.0	10.1	9.6	125.9	60.7	35.8	94.3	244.29	42.1
Lincoln State Hospital, Lincoln	1,220	214	17.5			243.6	12.3	3.0	66.5	41.7	(3)	177.7	229.07	37.8
Norfolk State Hospital, Norfolk	1,056	100	9.5			264.0	11.1	11.6	39.1	44.3	52.9	119.8	263.31	37.8
Kansas	4,654	828	17.8	230	25.7	232.8	13.9	14.6	98.9	64.5	13.9	98.3	209.38	39.9
Larned State Hospital, Larned	1,130	220	19.5	11	4.7	372.7	17.5	3.1	131.6	56.1	(3)	90.0	194.29	39.8
Osawatomie State Hospital, Osawatomie	1,649	312	18.9	62	17.1	166.2	13.2	35.7	103.6	62.7	40.3	110.3	220.63	39.4
Topeka State Hospital, Topeka	**1,875**	**296**	**15.8**	**157**	**53.0**	**268.0**	**12.9**	**1.4**	**73.8**	**71.6**	(3)	**92.8**	**208.41**	**40.5**

SOUTH ATLANTIC														
Delaware:														
Delaware State Hospital, Farnhurst	1,169	288	24.6			114.3	5.5	10.2	145.7	69.2	21.4	106.6	382.63	48.7
Maryland	6,481	1,033	15.9	2	.2	191.7	10.2	4.7	100.0	66.7	26.6	93.6	246.50	43.2
Crownsville State Hospital, Crownsville	1,359	231	17.0			189.3	10.7	12.1	118.5	92.3	8.8	78.2	251.04	37.4
Eastern Shore State Hospital, Cambridge	411	124	30.2			193.0	8.6	4.4	90.0	88.0	18.2	175.3	279.08	55.3
Springfield State Hospital, Sykesville	2,767	321	11.6			182.2	9.9	3.6	7.7	54.0	26.7	100.2	238.44	46.2
Spring Grove State Hospital, Catonsville	1,944	357	18.4	2	.6	209.0	10.6	1.1	120.1	60.7	48.6	83.2	248.31	40.3
Virginia	8,909	2,488	27.9	132	4.5	462.9	16.5	7.3	138.8	77.3	12.3	118.7	155.77	37.7
Central State Hospital, Petersburg	3,582	774	21.6	29	3.2	504.9	17.4	9.9	100.0	89.8	17.9	107.0	142.11	32.7
Eastern State Hospital, Williamsburg	1,688	393	23.3	82	15.7	550.3	11.9	4.3	81.8	76.8	23.4	163.8	179.76	42.4
Southwestern State Hospital, Marion	1,239	342	27.6	17	4.3	407.0	16.5	6.8	77.1	70.2	(3)	186.0	178.12	46.7
Western State Hospital, Staunton	2,400	979	40.8	4	.4	398.2	20.2	6.8	246.6	64.6	.4	101.2	147.91	35.4
West Virginia	3,841	1,079	28.1	539	39.2	289.0	16.3	10.3	148.2	83.6	9.6	118.6	230.47	35.0
Huntingtorf State Hospital, Huntington	910	265	29.1	281	72.2	308.7	13.2	11.4	290.0	56.7	22.8	80.5	357.20	22.6
Lakin State Hospital, Lakin	370	99	26.8	1	0.9	187.5	20.8	44.4	113.7	92.3	23.3	119.8	203.09	36.5
Spencer State Hospital, Spencer	908	240	26.4	64	19.5	450.0	27.3	3.0	85.1	101.3	8.8	157.7	164.40	37.6
Weston State Hospital, Weston	1,653	475	28.7	193	35.6	253.4	13.8	5.4	93.3	90.4	1.1	145.7	192.23	50.0
North Carolina	6,729	1,927	28.6			383.0	14.3	6.8	63.4	70.8	2.2	213.5	169.26	36.3
State Hospital, Goldsboro	2,208	515	23.3			430.2	25.0	7.0	36.4	90.2	5.3	174.4	108.07	41.7
State Hospital, Morganton	2,299	605	26.3			445.6	13.6	2.4	126.6	60.1	(3)	134.8	177.44	35.7
State Hospital, Raleigh	2,222	807	36.3			304.6	10.5	10.3	17.8	62.9	(3)	490.8	222.46	34.0
South Carolina:														
South Carolina State Hospital, Columbia	4,372	1,289	29.5	92	5.7	260.7	10.2	10.2	150.1	70.8	6.5	130.7	267.65	37.2
Georgia:														
Milledgeville State Hospital, Milledgeville	7,243	984	13.6			342.2	11.4	3.5	104.6	49.1	(3)	99.5	199.08	40.5
Florida:														
Florida State Hospital, Chattahoochee	4,299	656	15.3			300.2	11.8	5.3	26.2	58.1	49.8	202.5	279.40	37.3
District of Columbia:														
St. Elizabeths Hospital, Washington	5,938	899	15.1			121.0	5.1	8.5	70.1	42.0	75.1	140.8	669.64	67.9
EAST SOUTH CENTRAL														
Kentucky	6,215	1,506	24.2	3	.2	696.6	17.0	1.6	141.5	94.3	.1	96.8	130.14	40.1
Central State Hospital, Lakeland	2,379	411	17.3	2	.4	593.0	19.1	.8	98.5	91.0	(3)	95.9	152.43	37.2
Eastern State Hospital, Lexington	1,891	490	25.9	1	.2	632.7	14.4	2.3	193.7	96.5	(3)	73.0	121.96	42.4
Western State Hospital, Hopkinsville	1,945	605	31.1			999.5	17.7	1.8	136.5	95.9	.4	129.0	111.46	42.3
Tennessee	5,346	1,334	25.0			473.9	19.7	3.0	138.7	58.7	2.6	132.6	175.89	32.8
Central State Hospital, Nashville	1,808	346	19.1			258.1	15.6	.9	163.7	40.9	(3)	105.2	166.64	31.5
Eastern State Hospital, Knoxville	1,493	381	25.5			717.0	15.6	2.2	154.4	53.6	(3)	123.2	173.17	35.8
Western State Hospital, Bolivar	2,045	607	29.7			986.0	35.2	8.9	104.3	78.7	5.1	168.6	186.48	31.7
Alabama	5,435	1,366	25.1			493.0	13.1	1.9	217.0	71.0	(3)	81.7	172.10	38.8
Bryce Hospital, Tuscaloosa	3,800	944	24.8			471.6	13.3	1.8	263.8	46.8	(3)	75.9	182.29	38.3
Searcy Hospital, Mount Vernon	1,635	422	25.8			550.0	12.6	2.3	95.2	133.9	(3)	102.3	148.80	40.2
Mississippi	4,059	1,888	46.5	58	2.7	252.2	12.1	5.1	205.9	106.8	(3)	116.0	148.52	43.1
East Mississippi State Hospital, Meridian	780	208	26.7			197.3	13.6	3.4	254.2	59.8	(3)	91.0	185.32	39.2
Mississippi State Hospital, Whitfield	3,279	1,680	51.2	58	3.2	270.5	11.8	5.5	194.4	118.1	(3)	122.0	139.57	44.4

See footnotes at end of table.

TABLE 32.—*Summary data for State hospitals for mental disease, by hospital, 1938*—Continued

Hospital, by region and State	Resident patients	First admissions	Turnover rate	Voluntary admissions		Ratio of patients to assistant physicians	Ratio of patients to nurses and attendants	Percent of graduate nurses on total nursing staff	Discharge rate per 1,000 under treatment	Death rate per 1,000 under treatment	Percent of deaths autopsied	Replacement rate	Total per capita maintenance expenditure	Percent of total maintenance expenditures devoted to salaries and wages
				Number	Percent of total admissions									
WEST SOUTH CENTRAL														
Arkansas:														
Arkansas State Hospital, Little Rock	4,219	1,484	35.2	----	----	373.4	13.4	2.3	198.3	81.0	1.1	112.7	$211.34	34.8
Louisiana	5,604	1,348	24.1	2	.1	426.8	10.6	2.9	145.4	65.2	20.3	103.2	200.51	41.2
Central Louisiana State Hospital, Pineville	2,069	589	28.5	2	.3	517.3	13.8	6.7	196.9	52.9	53.4	96.8	265.17	33.8
East Louisiana State Hospital, Jackson	3,535	759	21.5	----	----	386.6	9.4	1.3	11.3	73.0	5.0	108.7	162.82	48.1
Oklahoma	7,252	1,470	20.3	1	.4	398.4	12.3	1.7	112.1	56.0	5.1	140.6	216.57	33.2
Central Oklahoma State Hospital, Norman	2,591	586	22.6	1	.1	505.6	10.3	1.2	59.6	58.5	5.8	236.0	219.24	34.6
Eastern Oklahoma State Hospital, Vinita	2,507	326	13.0	----	----	359.9	14.2	.6	116.3	41.3	12.2	85.3	225.24	31.4
State Hospital for Negro Insane, Taft	690	230	33.3	----	----	341.0	10.7	6.3	107.1	71.4	(3)	200.0	224.37	36.2
Western Oklahoma State Hospital, Supply	1,464	328	22.4	----	----	360.8	15.0	2.1	186.4	67.8	(3)	108.4	193.08	32.3
Texas	12,376	2,379	19.2	181	6.1	317.4	12.5	4.1	129.0	55.4	3.1	106.8	238.08	38.7
Austin State Hospital, Austin	2,428	346	14.3	20	4.9	338.9	15.0	3.8	58.0	51.4	(3)	138.3	276.51	34.6
Rusk State Hospital, Rusk	2,167	352	16.2	1	.2	267.0	9.5	3.1	62.9	62.9	(3)	144.6	229.96	44.8
San Antonio State Hospital, San Antonio	2,815	614	21.8	136	18.8	302.3	15.5	9.1	153.7	55.1	13.3	97.4	245.95	38.7
Terrell State Hospital, Terrell	2,595	525	20.2	2	.3	318.3	12.8	.5	122.8	68.3	(3)	97.4	202.68	39.4
Wichita Falls State Hospital, Wichita Falls	2,371	542	22.9	22	2.7	381.0	11.0	4.8	219.4	40.6	(3)	96.5	235.81	37.6
MOUNTAIN														
Montana:														
Montana State Hospital, Warm Springs	1,897	365	19.2	----	----	474.3	18.2	6.7	118.9	72.5	20.0	118.3	192.97	41.7
Idaho	938	227	24.2	----	----	467.0	16.7	10.7	73.2	78.7	(3)	199.4	217.35	38.6
State Hospital North, Orofino	380	75	19.7	----	----	384.0	16.7	4.3	130.6	93.9	(3)	83.6	247.21	36.1
State Hospital South, Blackfoot	558	152	27.2	----	----	550.0	16.7	15.2	27.6	66.6	(3)	419.0	196.66	40.7
Wyoming:														
Wyoming State Hospital, Evanston	623	87	14.0	----	----	557.0	13.3	28.6	91.7	56.1	7.3	112.0	193.55	52.9
Colorado:														
Colorado State Hospital, Pueblo	3,731	329	8.8	37	7.2	331.8	8.2	5.8	71.5	56.3	16.6	94.1	269.05	50.9
New Mexico:														
New Mexico State Hospital, Las Vegas	820	188	22.9	----	----	394.5	7.9	8.0	48.5	67.9	31.7	199.1	253.49	37.5
Arizona:														
Arizona State Hospital, Phoenix	860	270	31.4	----	----	286.7	9.7	3.4	126.4	91.8	3.0	157.9	288.12	48.7

Utah:														
Utah State Hospital, Provo	1,048	276	26.3	77	22.7	374.3	10.5	1.9	171.6	39.9	3.8	120.6	230.40	59.8
Nevada:														
Nevada State Hospital for Mental Diseases, Reno	345	81	23.5	-------	--------	366.0	9.9	2.7	119.9	52.8	(3)	127.8	268.04	37.4
PACIFIC														
Washington	6,217	1,298	20.9	177	11.4	234.5	10.9	12.5	95.1	71.5	52.7	125.4	234.66	50.8
Eastern State Hospital, Medical Lake	1,802	327	18.1	24	.4	292.5	11.1	12.0	98.4	65.4	59.6	104.5	221.63	56.7
Northern State Hospital, Sedro Woolley	1,948	528	27.1	111	17.2	273.0	9.7	6.1	90.6	73.0	52.9	169.6	242.51	47.7
Western State Hospital, Fort Steilacoom	2,467	443	18.0	42	7.7	186.9	11.9	19.0	96.1	74.6	48.2	106.9	238.04	49.2
Oregon	3,896	1,019	26.2	84	6.8	301.4	17.2	3.9	128.7	86.6	45.6	115.6	174.75	45.5
Eastern Oregon State Hospital, Pendleton.	1,284	220	17.1	19	7.3	260.6	21.0	3.2	110.9	70.7	50.5	90.9	161.70	38.0
Oregon State Hospital, Salem	2,612	799	30.6	65	6.7	326.9	15.8	4.2	136.9	93.9	43.9	124.6	181.25	48.8
California	22,163	6,217	28.1	328	4.6	339.5	11.4	.9	131.3	60.6	11.0	136.3	247.41	60.7
Agnew State Hospital, Agnew	3,475	708	20.4	82	10.2	346.8	12.8	1.1	125.3	74.6	16.7	93.0	219.12	44.5
Camarillo State Hospital, Camarillo	2,120	710	33.5	13	1.8	450.0	9.5	1.1	37.3	20.0	4.4	550.4	267.22	53.0
Mendocino State Hospital, Talmage	2,825	655	23.2	12	1.6	347.8	11.4	.8	160.7	37.2	52.7	109.5	236.57	65.9
Napa State Hospital, Inola	3,622	825	22.8	49	5.1	362.0	11.2	.6	50.7	75.3	11.2	185.4	279.09	62.1
Norwalk State Hospital, Norwalk	2,435	749	30.8	7	.7	347.3	10.3	.4	222.6	66.8	(4)	98.0	255.84	69.8
Patton State Hospital, Patton	3,658	1,200	32.8	61	4.4	284.4	11.1	.9	213.8	48.2	7.1	106.1	235.55	63.0
State Narcotic Hospital, Spadra	49	76	155.1	-------	--------	49.0	32.7	---------	(4)	(4)	(3)	155.1	(4)	(4)
Stockton State Hospital, Stockton	3,979	1,294	32.5	104	6.6	352.5	12.6	1.3	77.7	80.2	1.6	209.7	247.72	64.2

[1] Percent that total admissions comprise of total separations.
[2] Percent that first admissions comprise of resident patients.
[3] Not reported.
[4] Not available.

Errata: Table 32, Page 97, numbers of footnotes 1 and 2 should be reversed so as to read as follows:

1. Percent that first admissions comprise of resident patients.
2. Percent that total admissions comprise of total separations.

ALABAMA

The two State hospitals are governed by a board of eight trustees, including the Governor and seven of his appointees.

In 1938 there were 5,300 beds in State hospitals in Alabama and 50 beds in a private institution. The Federal Government maintains a psychiatric service in two veterans' hospitals which report 808 patients.

The average daily population for 1938 was 5,423 in the State hospitals and 25 in the private institution. During that year the State hospitals admitted 1,796 patients and the private institution 368. On the last day of the year there were 5,460 patients present.

The hospitals have clinical laboratories and X-ray equipment.

In the State hospitals the ratio of assistant physicians to patients is 1:493.0, that of nursing personnel to patients is 1:13.1, and that of total employees to patients is 1:8.5.[1]

The State expended $933,309.43 for maintenance at a per capita cost of $172.10.

ARIZONA

The hospital is under the control of the Board of Directors of State Charitable Institutions consisting of the Governor, the State treasurer, and one elector of the State appointed by the Governor.

Arizona in 1938 had in its one hospital 928 beds for the treatment of mental disorders. There are two veterans' general hospitals with psychiatric services which report six patients.

The State hospital has a clinical laboratory and X-ray equipment. It maintains no out-patient service.

In the State hospital the ratio of assistant physicians to patients is 1:286.7, that of nursing personnel to patients is 1:9.7, and that of total employees to patients is 1:7.0.

The State expended $247,779.80 for maintenance of the hospital. The per capita cost was $288.12.

ARKANSAS

The Arkansas State Hospital is controlled by a board of five members appointed by the Governor.

The institution has three branches. In 1938 there were 3,985 beds in the State hospital and in one veterans' facility there were 1,347 beds. There is a psychiatric service in a veterans' general hospital which reports five patients.

The average daily population for 1938 was 4,107 patients in the State hospital and 1,033 in the veterans' facility. During the year the State hospital admitted 1,843 patients and the veterans' facility 823. On the last day of the year there were 5,238 patients present.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

The State hospital has a clinical laboratory and X-ray equipment.

In the State hospital the ratio of assistant physicians to patients is 1:373.4, that of nursing personnel to patients is 1:13.4, and that of total employees to patients is 1:7.1.

The State expended $867,971.00 for the maintenance of the hospital at a per capita cost of $211.34.

CALIFORNIA

The Department of Institutions has at its head a director who is a member of the Governor's cabinet.

California has 22,542 beds for the treatment of mental disorders in eight State hospitals, including the State Narcotic Hospital. There are eight psychiatric services in general hospitals, with 298 beds. Private institutions number 22 with 1,267 beds.

Federal hospitals have 1,131 beds for mental disorders. These include one veterans' hospital (1,026 beds), one Army hospital (65 beds), and one Naval hospital (40 beds). A psychiatric service in a veterans' general hospital reports 555 patients.

The State and Federal hospitals reporting have X-ray facilities and clinical laboratories.

In the State hospitals, not including the State Narcotic Hospital, the ratio of assistant physicians to patients is 1:339.5, that of nursing personnel to patients is 1:11.4, and that of total employees to patients is 1:7.9.[1]

The State expended $5,362,854.75 for the maintenance of the hospitals at a per capita cost of $247.41.

COLORADO

The State maintains a mental hospital and a psychopathic hospital which is a division of the university hospital. The State hospital is controlled by a board of three commissioners appointed by the Governor. The psychopathic hospital is governed by the regents of the university.

Colorado in 1938 had 3,821 beds in its mental hospital and 78 beds in the psychopathic hospital. In three private institutions there were 311 beds.

The average daily population for 1938 was 3,650 patients in the State hospital, 78 in the psychopathic hospital, and 224 in the private institutions. During that year the State hospital admitted 515 patients, the psychopathic hospital 836 patients, and the private institutions 724 patients. On the last day of the year there were 4,032 patients present.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

The State hospital has a clinical laboratory and X-ray equipment. The psychopathic hospital has all the usual clinical facilities and contributes to teaching in the university school of nursing. It maintains a large out-patient service, sessions being held at three points.

In the State hospital the ratio of assistant physicians to patients is 1:331.8, that of nursing personnel to patients is 1:8.2, and that of total employees to patients is 1:5.2.[1]

The State expended $982,057.44 for the maintenance of the State hospital and $186,682.93 for the psychopathic hospital. The per capita cost was $269.05 in the State hospital and $2,393.37 in the psychopathic hospital.

Federal hospitals have 623 beds for mental disorders.

CONNECTICUT

Each of the three State hospitals has an appointive board of 12 members.

Connecticut in 1938 had 7,432 beds in its mental hospitals. One endowed hospital had 270 beds. There were 686 beds in private institutions. In three general hospitals, including two county institutions and one university hospital, there were 108 beds for observation and temporary treatment. There is a psychiatric service in a veterans' general hospital which reports one patient.

In the State hospitals the average daily population for 1938 was 7,205 patients; there were 691 in private institutions. During that year the State hospitals admitted 1,699 patients, the private institutions 1,684 patients, and the psychiatric wards in general hospitals 1,108 patients. On the last day of the year there were 8,061 patients present.

Each State hospital has a clinical laboratory and X-ray equipment and two maintain schools of nursing. Out-patient service is given at the hospitals.

In the State hospitals the ratio of assistant physicians to patients is 1:205.9, that of nursing personnel to patients is 1:7.1, and that of total employees to patients is 1:4.7.[1]

The State expended $2,423,724.92 for the maintenance of the hospitals at a per capita cost of $336.39.

DELAWARE

The hospital is controlled and managed by a board of nine trustees, representing the counties equally and more than one political party.

Delaware in 1938 had in its one hospital 1,169 beds for the treatment of mental disorders. The average daily population for 1938 was 1,143 patients in the State hospital. During that year the State hospital

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

admitted 341 patients. On the last day of the year there were 1,169 patients present.

The State hospital has a clinical laboratory, X-ray equipment, and a school of nursing. It maintains a large out-patient service, sessions being held at five points.

In the State hospital the ratio of assistant physicians to patients is 1:114.3, that of nursing personnel to patients is 1:5.5, and that of total employees to patients is 1:4.8.[1]

The State expended $437,349.09 for maintenance of the hospital. The per capita cost was $382.63.

DISTRICT OF COLUMBIA

The Federal Department of the Interior maintained St. Elizabeths Hospital until June 30, 1940, when it was transferred to the Federal Security Agency, under the direction of the U. S. Public Health Service. Residents of the District receive treatment there, and also the mentally ill of the Army, Navy, and several other Federal services.

St. Elizabeths Hospital has a capacity of 6,043 beds. Gallinger Municipal Hospital has a psychiatric building with 186 beds for reception and temporary treatment. There are two veterans' general hospitals which report six patients.

These institutions and one private hospital admitted 4,308 patients in 1938. The average daily population of St. Elizabeths Hospital was 5,810 and of the Gallinger Municipal Hospital psychiatric service 144. On the last day of the year there were 6,082 patients present.

Both institutions maintain schools of nursing. In St. Elizabeths Hospital the ratio of assistant physicians to patients is 1:121.0, that of nursing personnel to patients is 1:5.1, and that of total employees to patients is 1:3.2.[1]

The Gallinger Hospital maintains an out-patient clinic.

In 1938 the Federal Department of the Interior expended $3,890,615.00 for the maintenance of St. Elizabeths Hospital at a per capita cost of $669.64.

FLORIDA

The State mental hospital is controlled by a board of seven elective State officials.

In 1938 Florida had 4,297 beds in the State hospital. There were 172 beds in four private institutions. The Federal Government maintains a psychiatric service in two veterans' general hospitals which report 11 patients.

The average daily population for 1938 was 4,203 patients in the State hospital and 48 in private institutions. The State hospital

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

admitted 802 patients and the private institutions 711. On the last day of the year there were 4,347 patients present.

The State hospital has a clinical laboratory, X-ray equipment, and a school of nursing. No organized out-patient work is carried on.

In the State hospital the ratio of assistant physicians to patients is 1:300.2, that of nursing personnel to patients is 1:11.8, and that of total employees to patients is 1:5.2.

The State expended $1,189,416.50 for maintenance, at a per capita cost of $279.40.

GEORGIA

The State hospital is managed by the Board of Control. That institution reports 7,259 beds. There are two private institutions with 190 beds and one veterans' hospital with 1,061 beds. A psychiatric service in a veterans' general hospital reports four patients.

In 1938 there were 1,308 admissions to the State hospital, 637 to private institutions, and 615 to the veterans' hospital. The average daily population was 7,187 patients in the State hospital, 142 in the private institutions, and 1,005 in the veterans' hospital. There were 8,454 patients present on the last day of the year.

Both public and private institutions maintained laboratories and X-ray equipment. There is no school of nursing. No out-patient clinic is maintained.

In the State hospital the ratio of assistant physicians to patients is 1:342.2, that of nursing personnel to patients is 1:11.4, and that of total employees to patients is 1:8.2.

The State expended $1,430,805.00 for maintenance, at a per capita cost of $199.08.

IDAHO

The Governor is commissioner of institutions and has direct authority over the State hospitals. There is also a director, subordinate to the Governor.

There are 2 State hospitals with a total of 945 beds. A psychiatric service in a veterans' general hospital reports 3 patients. The average daily population for 1938 was 934 in the State hospitals. During 12 months 335 patients were admitted and on the last day of the year 938 were present.

There is a clinical laboratory in each institution and some X-ray equipment. There is no school of nursing. Neither hospital has an out-patient clinic.

In the State hospitals the ratio of assistant physicians to patients is 1:467.0, that of nursing personnel to patients is 1:16.7, and that of total employees to patients is 1:8.9.[1]

The State expended $201,268.31 for maintenance, at a per capita cost of $217.35.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

INDIANA

Control is exercised by the State Division of Institutions.

Indiana has 8,480 beds for the treatment of mental disorders, 8,366 in its six State hospitals and 114 in three private institutions. There are facilities for the treatment of mental disorders in one general hospital. The Federal veterans' hospital has 1,506 beds for mental disorders.

The State hospitals have clinical laboratories and X-ray equipment. Out-patient service is given at the hospitals.

In the State hospitals the ratio of assistant physicians to patients is 1:282.2, that of nursing personnel to patients is 1:12.9, and that of total employees to patients is 1:7.7.[1]

The State expended $1,586,013.09 for the maintenance of the hospitals at a per capita cost of $200.58.

ILLINOIS

The mental hospitals are under the immediate control of the Department of Public Welfare.

Illinois has nine State hospitals for the treatment of mental disorders with 30,362 beds and a hospital for insane criminals with 475 beds. A county hospital and a university hospital have a total of 247 beds for temporary observation. In 14 private institutions there are 677 beds.

There are two Federal hospitals with a total of 3,035 beds. A psychiatric service in two veterans' general hospitals report 70 patients.

The average daily population for 1938 was 28,876 in the State hospitals, 416 in the private institutions, and 2,776 in the veterans' hospitals. During that year the State hospitals admitted 9,669 patients, the private institutions 1,113 patients, and the veterans' hospitals 854 patients. On the last day of the year there were 32,532 patients present.

The State hospitals all have clinical laboratories and X-ray equipment; a central school of nursing is maintained. Out-patient service is maintained at 17 points within and outside the hospitals.

In the State hospitals the ratio of assistant physicians to patients is 1:223.8, that of nursing personnel to patients is 1:9.6, and that of total employees to patients is 1:6.3.[1]

The State expended $7,561,441.31 for the maintenance of the hospitals at a per capita cost of $261.86.

IOWA

The four State hospitals are supervised by a Board of Control. The university hospital maintains a psychiatric department.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

Iowa has 6,823 beds for mental disorders in its four State hospitals, 86 beds for insane criminals at the Men's Reformatory, 1,556 beds in 55 county institutions and 50 beds in its university hospital. There is a veterans' hospital with 1,015 beds. In three private institutions there are 430 beds. A psychiatric service in a veterans' general hospital reports four patients.

The average daily population for 1938 was 6,609 in the State hospitals, 86 in the Reformatory, 37 in the psychopathic hospital, 1,015 in the veterans' hospital, and 381 in the private institutions. During that year the State hospitals admitted 1,539 patients, the Men's Reformatory 19, the psychopathic hospital 379, the veterans' hospital 263, and the private institutions 900. On the last day of the year there were 8,168 patients present.

The State hospitals have clinical laboratories and X-ray equipment. They do casual out-patient work at the institutions.

In the State hospitals the ratio of assistant physicians to patients is 1:347.8, that of nursing personnel to patients is 1:16.4, and that of total employees to patients is 1:8.7.[1]

The State expended $1,300,106.11 for the maintenance of the hospitals at a per capita cost of $194.19.

KANSAS

The State hospitals are under the control of the Board of Administration consisting of the Governor and three members.

There are three State hospitals with 4,613 beds and two private institutions with 98 beds. There was a ward for insane criminals at the State prison with 80 beds. The Federal Government maintains psychiatric services in two veterans' general hospitals which report 11 patients.

In 1938 the average daily population was 4,656 in the State hospitals and 58 in the private institutions. During the year the State hospitals admitted 894 patients and the private institutions admitted 302 patients. On the last day of the year there were 4,712 patients present.

The hospitals have clinical laboratories and X-ray equipment.

In the State hospitals the ratio of assistant physicians to patients is 1:232.8, that of nursing personnel to patients is 1:13.9, and that of total employees to patients is 1:7.4.[1]

The State expended $974,869.39 for the maintenance of the hospitals at a per capita cost of $209.38.

KENTUCKY

The Department of Welfare controls the three mental hospitals. The medical and psychiatric director is the official in that department to whom the institutions report directly.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

The three mental hospitals have a capacity of 6,262 beds. There are five private institutions with 171 beds. The Louisville City Hospital has a service of 34 beds for reception and temporary treatment.

The State hospitals admitted 1,857 patients in 1938, the municipal hospital 484, and the private institutions 737.

The average daily population of the State hospitals for 1938 was 6,269 and there were 6,215 patients present on the last day of the year.

The Federal Government maintains a veterans' facility and a hospital for the treatment of narcotic drug addicts. There were 615 admissions to the veterans' facility in 1938 and the average daily population was 375; there were 939 admissions to the narcotic hospital and the average daily population was 939.

These public institutions all maintain laboratories and X-ray equipment.

In the State hospitals the ratio of assistant physicians to patients is 1:696.6, that of nursing personnel to patients is 1:17.0, and that of total employees to patients is 1:10.2.[1]

There is one parole clinic. The State expended $815,862.22 for maintenance of the State hospitals; the per capita cost was $130.14.

LOUISIANA

The State hospitals are supervised by the State Department of Public Welfare, consisting of five members appointed by the Governor. Each State hospital has a board of eight administrators appointed by the Governor who ex officio is president of each board.

There are two State hospitals with 6,069 beds. There is a municipal hospital in New Orleans with 100 beds. In 1938 there were 1,543 admissions to the State hospitals, 471 to the municipal hospital, and 602 to the two private institutions.

The average daily population of the State hospitals was 5,548 and there were 5,604 patients present on the last day of the year.

The Federal Government maintains a psychiatric service in the veterans' facility at Alexandria. They report two patients on June 30, 1938.

The public institutions all maintain clinical laboratories and X-ray equipment. No out-patient clinics were maintained.

In the State hospitals the ratio of assistant physicians to patients is 1:426.8, that of nursing personnel to patients is 1:10.6, and that of total employees to patients is 1:8.3.[1]

The State expended $1,104,220.08 for maintenance, at a per capita cost of $200.51.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

MAINE

The Department of Institutional Service of the State of Maine supervises the activities of the two State hospitals.

The two hospitals report 2,690 beds and two private institutions report 48 beds. The Federal Government maintains a psychiatric service in a veterans' general hospital which reports three patients.

In 1938 there were 606 admissions to the State hospitals and six admissions to one private institution. The average daily population for 1938 was 2,633 in the State hospitals and 25 in the private institutions. There were 2,706 patients present on the last day of the year.

Both State hospitals maintain a laboratory and X-ray equipment. Neither hospital has a school of nursing. There is no out-patient clinic.

In the State hospitals the ratio of assistant physicians to patients is 1:329.1, that of nursing personnel to patients is 1:9.5, and that of total employees to patients is 1:5.0.

The State expended $756,767.27 for maintenance at a per capita cost of $287.42.

MARYLAND

The Board of Mental Hygiene exercises some supervision over the State hospitals.

There are four State hospitals, a university clinic, one veterans' hospital, an institution supported by a foundation, and eight private institutions. In 1938 there were 1,214 admissions to the State hospitals, 284 to the university clinic, 360 to the veterans' hospital, 389 to the institution supported by a foundation, and 748 to private institutions.

The average daily population was 6,325 in the State hospitals, and there were 6,481 patients present on the last day of the year.

Each hospital maintains a clinical laboratory and has X-ray equipment. There is no school of nursing. The university clinic is very well staffed and equipped. In the State hospitals the ratio of assistant physicians to patients is 1:191.7, that of nursing personnel to patients is 1:10.2, and that of total employees to patients is 1:6.8.[1]

None of these institutions maintains an out-patient clinic. The university clinic has a large out-patient service.

The State expended $1,559,063.99 for maintenance, at a per capita cost of $246.50.

MASSACHUSETTS

The State Department of Mental Health has administrative authority over the State hospitals for mental disorders and licenses all private institutions.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

The 13 State hospitals have 22,548 beds, including 550 beds in Monson State Hospital for psychotic epileptics and 950 beds in the hospital for criminal insane patients. The psychopathic hospital has 110 beds, the State Infirmary at Tewksbury 603 beds, and private institutions have 647 beds. One institution supported by a foundation is included among the private hospitals. There are two veterans' hospitals with 1,950 beds. Two general hospitals have 66 beds for psychiatry.

In 1938 the average daily population was 21,098 in the State hospitals, 74 in the psychopathic hospital, 542 psychotic epileptics in the hospital for epileptics, 478 in the State Infirmary, 500 in the private institutions, and 59 in the psychiatric services of the two general hospitals. During the year the State hospitals admitted 5,294, including 58 psychotic epileptics to the hospital for epileptics, the psychopathic hospital 2,181, and private institutions 2,139. On the last day of the year there were 23,879 patients present.

The State hospitals are equipped with clinical and pathological laboratories and X-ray equipment. Out-patient work is conducted by all these hospitals and in addition psychiatric service is given to the children's courts and to public schools throughout the State.

Four State hospitals and the one hospital supported by a foundation have schools of nursing; five more State hospitals offer 2-year courses.

The Boston Psychopathic Hospital receives patients from the metropolitan area and arranges for their admission to other State hospitals, except for a few cases held for teaching or treatment.

In the other State hospitals the ratio of assistant physicians to patients is 1:197.2, that of nursing personnel to patients is 1:7.0, and that of total employees to patients is 1:4.0.

The State expended $8,782,236.41 for the maintenance of 11 State hospitals, including maintenance for the psychotic epileptics in Monson State Hospital, at a total per capita cost of $423.34, and $251,418.61 for the psychopathic hospital at a per capita cost of $3,397.55. Maintenance expenditures for Bridgewater State Hospital and the State Infirmary at Tewksbury are not available.

MICHIGAN

The State Hospital Commission has supervisory authority over the six State hospitals, with 11,560 beds. One county maintains an institution of 3,683 beds. In the city of Detroit there are two psychiatric hospital services, one in a municipal and one in a private general hospital. There are also two private mental hospitals. The university hospital includes a neuropsychiatric institute. There is a veterans' facility with 1,010 beds.

During 1938 the average daily population was 11,228 patients in the State hospitals, 632 in the private institutions, and 928 in the veterans' hospital. During that year the State hospitals admitted 2,725 patients, the private institutions 1,201 patients, and the veterans' hospital 403 patients. On the last day of the year there were 13,166 patients present. The county institution had an average daily population of 3,639 patients and during the year admitted 496 patients. The general hospital services report 1,063 admissions for the year.

State, county, and private institutions all report clinical laboratories and X-ray equipment. Schools of nursing are conducted by two of the State hospitals, and by the county institution.

In the State hospitals the ratio of assistant physicians to patients is 1:303.5, that of nursing personnel to patients is 1:8.4, and that of total employees to patients is 1:5.2.[1] In the county institution the ratio of assistant physicians to patients is 1:182.0, that of nursing personnel to patients is 1:4.4, and that of total employees to patients is 1:3.0.

The State expended $3,568,151.30 for the maintenance of the State hospitals at a per capita cost of $317.88 in 1938, and paid $1,087,863.05 to Wayne County towards the maintenance of its patients. Wayne County expended $145,208.95 and the per capita maintenance rate for the county institution was $338.85.

The Federal Government maintains one veterans' facility with 1,010 beds. There were 403 admissions during 1938, and 966 patients were present on the last day of the year.

MINNESOTA

The seven State hospitals are under the jurisdiction of the State Board of Control.

In 1938 there were 10,929 beds in State mental hospitals in Minnesota; there were 129 beds in six private institutions. The university hospital had 37 beds for psychiatric cases and two other general hospitals had 45 beds. A veterans' facility reported 885 patients and a psychiatric ward in a veterans' general hospital two patients.

The average daily population in the State institutions was 10,003, in the university clinic 28, and in the private institutions 98. During the year the State hospitals admitted 2,306 patients, the private institutions 464, the veterans' facility 315, and the university clinic 245. On the last day of the year there were 10,924 patients present.

The State hospitals report having a clinical laboratory and X-ray equipment. The university clinic maintains out-patient service.

In the State hospitals the ratio of assistant physicians to patients is 1:454.7, that of nursing personnel to patients is 1:13.9, and that of total employees to patients is 1:8.0.[1]

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time

The State expended $2,258,291.71 for maintenance at a per capita cost of $225.76.

MISSISSIPPI

The State hospitals are under the control of the State Eleemosynary Board, made up of five elective officials.

There are two State hospitals reporting 4,350 beds and a veterans' facility with 788 beds; two private institutions report 42 beds. A psychiatric service in a veterans' general hospital reports three patients.

The average daily population for 1938 was 4,035 patients in the State hospitals, 20 in the private institutions, and 799 in the veterans' facility. During the year the State hospitals admitted 2,143 patients, the veterans' facility 728 patients, and the private institutions 334 patients. On the last day of the year there were 4,831 patients present.

The State hospitals have clinical laboratories and X-ray equipment.

In the State hospitals the ratio of assistant physicians to patients is 1:252.2, that of nursing personnel to patients is 1:12.1, and that of total employees to patients is 1:6.7.[1]

The State expended $2,024,242.70 for the maintenance of the hospitals, at a per capita cost of $251.11.

MISSOURI

The Board of Managers of the State Eleemosynary Institutions has complete jurisdiction over the four State hospitals. The city of St. Louis maintains a mental hospital in the Hospital Division of the Department of Public Welfare. The Medical Center for Federal Prisoners is under the jurisdiction of the Department of Justice and reports 211 patients.

Missouri had in its State hospitals 8,724 beds and in eight private institutions there were 487 beds. In two veterans' general hospitals a psychiatric service is maintained and eleven patients were reported.

The average daily population for 1938 was 8,061 patients in the State hospitals and 333 in the private institutions. During the year the State hospitals admitted 2,384 patients and the private institutions 867. On the last day of the year there were 8,590 patients present.

The State hospitals and the city institution have clinical laboratories and X-ray equipment.

In the State hospitals the ratio of assistant physicians to patients is 1:268.7, that of nursing personnel to patients is 1:12.1, and that of total employees to patients is 1:6.1.[1]

The State expended $2,024,242.70 for the maintenance of the hospitals at a per capita cost of $251.11. The city institution spent $890,399.67 at a per capita cost of $249.97.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

MONTANA

The State hospital is under the jurisdiction of the State Board of Commissioners for the Insane, which consists of the Governor, the Secretary of State, and the Attorney General. It has 1,897 beds. No private institutions are reported.

The average daily population for 1938 was 1,897. During that year the hospital admitted 531 patients and on the last day of the year there were 1,897 patients present.

The hospital has a clinical laboratory.

In the State hospital the ratio of assistant physicians to patients is 1:473.3, that of nursing personnel to patients is 1:18.2, and that of total employees to patients is 1:11.4.

The State expended $366,069.51 for maintenance at a per capita cost of $192.97.

NEBRASKA

The three State hospitals are under the jurisdiction of the State Board of Control composed of three members appointed by the Governor and confirmed by the Legislature.

Nebraska has 3,934 beds for mental disease in its three State hospitals. A psychiatric service in a veterans' general hospital reports one patient.

The average daily population for 1938 was 3,849 in the State hospitals. During the year 726 patients were admitted and on the last day of the year there were 3,884 patients present.

The State hospitals have clinical laboratories and X-ray equipment.

There are four psychiatric services in general hospitals, all within one county. These have 229 beds and report 435 admissions for the year 1937.

In the State hospitals the ratio of assistant physicians to patients is 1:213.8, that of nursing personnel to patients is 1:11.0, and that of total employees to patients is 1:6.2.[1]

The State expended $941,817.19 for the maintenance of the hospitals at a per capita cost of $244.69.

NEVADA

The superintendent of the State hospital is responsible directly to the Governor.

The State hospital has 346 beds. The average daily population for 1938 was 366 and there were 92 admissions. On the last day of the year there were 345 patients present.

There is a small clinical laboratory and the X-ray equipment is obsolete.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

In the State hospital the ratio of assistant physicians to patients is 1:366.0, that of nursing personnel to patients is 1:9.9, and that of total employees to patients is 1: 9.4.

The State expended $98,102.18 in 1938 for the maintenance of the State hospital at a per capita cost of $268.04.

NEW HAMPSHIRE

The State hospital is governed by a board of seven trustees, including the Governor and six of his appointees.

In 1938 New Hampshire had in its mental hospital 2,180 beds. The average daily population was 2,091 and during the year the hospital admitted 601 patients. On the last day of the year there were 2,136 patients present.

The hospital has a clinical laboratory and X-ray equipment. It maintains out-patient service at three points. It has a school of nursing.

In the State hospital the ratio of assistant physicians to patients is 1:209.1, that of nursing personnel to patients is 1:6.6, and that of total employees to patients is 1:3.8.[1]

The State expended in 1938 $801,266.00 for the maintenance of the State hospital, at a per capita cost of $383.20.

NEW JERSEY

The State Department of Institutions and Agencies controls and supervises the three State hospitals and inspects the six county institutions and seven private institutions.

In 1938 there were 10,523 beds in the State hospitals, 5,873 in the county hospitals, and 400 in the private institutions. There is also a veterans' facility with 1,034 beds. Two general hospitals have psychiatric services.

The average daily population in 1938 was 10,405 in the State hospitals, 5,413 in the county hospitals, 1,032 in the veterans' facility, 294 in the private institutions, and 367 in the psychiatric services of general hospitals. During the year the State hospitals admitted 2,873 patients, the county hospitals 1,443, the veterans' facility 341, and the private hospitals 698. On the last day of the year there were 17,169 patients present.

The State, Federal, and two county institutions have clinical laboratories and X-ray equipment. Two State institutions and one county institution maintain schools of nursing. Extensive out-patient service is maintained.

In the State hospitals the ratio of assistant physicians to patients is 1:165.2, that of nursing personnel to patients is 1:8.4, and that of total employees to patients is 1:4.4.[1]

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

The State expended $4,036,735.38 for the maintenance of State hospitals, at a per capita cost of $387.96.

NEW MEXICO

The State hospital is managed by a board consisting of three elective public officers.

In 1938 in the one hospital there were 850 beds, 215 admissions, and 820 patients present on the last day of the year. The average daily population for 1938 was 789. Psychiatric services are maintained in two veterans' general hospitals which report 15 patients.

The State institution has a clinical laboratory.

In the State hospital the ratio of assistant physicians to patients is 1:394.5, that of nursing personnel to patients is 1:7.9, and that of total employees to patients is 1:6.3.[1]

The State expended $200,000.00 for the maintenance of the hospital, at a per capita cost of $253.49.

NEW YORK

The Department of Mental Hygiene has control and supervision of 20 civil State hospitals. Two hospitals for insane criminals are controlled by the Department of Correction. The Department of Mental Hygiene licenses and inspects 28 private hospitals. One institution supported by a foundation is included among the private hospitals. Two of the State hospitals are devoted to research and teaching, one of them serving also for the admission and observation of patients from a district.

There are 12 psychiatric services in general hospitals.

The average daily population for 1938 was 69,823 in the State civil and criminal hospitals, 194 in the psychopathic hospitals, 2,384 in the veterans' facilities, 2,069 in the private institutions, and 350 in the hospital supported by a foundation. The psychiatric services of three veterans' general hospitals report 22 patients. During the year the State hospitals admitted 16,261 patients, the psychopathic hospitals 966, the veterans' facilities 1,110, the private institutions 6,686, and the hospital supported by a foundation 311. On the last day of the year there were 75,330 patients present. The psychiatric services in general hospitals reported 43,529 admissions and an average daily population of 1,031 patients.

All the State hospitals have clinical laboratories and X-ray equipment. Schools of nursing are maintained. Out-patient service is carried on at many points.

In the State hospitals, excluding the two psychopathic hospitals, the ratio of assistant physicians to patients is 1:181.8, that of nursing

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

personnel to patients is 1:6.3, and that of total employees to patients is 1:4.2.[1]

The State expended $28,399,762.22 for the maintenance of its State hospitals at a per capita cost of $406.74; and $653,521.77 for the maintenance of the psychopathic hospitals at a per capita cost of $3,368.67.

NORTH CAROLINA

The State hospitals are under the control of a local board for each institution appointed by the Governor.

There are 6,766 beds in the three State hospitals and 357 beds in six private institutions. The average daily population for 1938 was 4,360 white and 2,151 colored patients in the State hospitals and 121 in private institutions. During the year the State hospitals admitted 2,227 patients and the private institutions 682. On the last day of the year there were 6,850 patients present. The State hospital for Negro patients cares not only for the mentally ill but also for the mentally defective.

The State hospitals have clinical laboratories and X-ray equipment. Two of the three maintain schools of nursing.

In the State hospitals the ratio of assistant physicians to patients is 1:383.0, that of nursing personnel to patients is 1:14.3, and that of total employees to patients is 1:9.2.[1]

The State expended $1,102,081.72 for the maintenance of the hospitals, at a per capita cost of $169.26.

NORTH DAKOTA

The State hospital is managed by a Board of Control consisting of three members.

There are 2,000 beds in the State hospital. The average daily population for 1938 was 1,818 patients. During the year 450 patients were admitted and on the last day of the year there were 1,862 patients present. A psychiatric service in a veterans' general hospital reports one patient.

There is laboratory and X-ray equipment.

In the State hospital the ratio of assistant physicians to patients is 1:259.7, that of nursing personnel to patients is 1:9.7, and that of total employees to patients is 1:6.0.

In 1938 the State expended $641,336.06 for maintenance at a per capita cost of $352.77.

OHIO

The Department of Public Welfare, through its Division of Mental Diseases, supervises and controls the eight State hospitals.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

In 1938 there were 18,114 beds in the eight State hospitals and a city hospital for mental patients had 33 beds. There is a Veterans Administration Facility with 1,102 beds. A psychiatric service in a veterans' general hospital reports 36 patients. Two municipal general hospitals and one private hospital have psychiatric wards for observation and temporary study. There are 15 private institutions with a capacity of 1,111.

The average daily population for 1938 was 16,287 in the State hospitals, 1,051 in the veterans' facility, and 876 in the private institutions. During the year the State hospitals admitted 3,846 patients, the veterans' facility 342, and the private institutions 2,067. On the last day of the year there were 19,690 patients present. The psychiatric services in general hospitals reported 2,560 admissions and an average daily population of 354.

All the State hospitals have clinical laboratories and X-ray equipment. Schools of nursing are maintained in seven of the State hospitals. Out-patient service is carried on by many of them.

In the State hospitals the ratio of assistant physicians to patients is 1:381.0, that of nursing personnel to patients is 1:15.5, and that of total employees to patients is 1:9.1.[1]

In 1938 the State expended $3,780,162.02 for the maintenance of its hospitals at a per capita cost of $207.18.

OKLAHOMA

Supervision of the mental hospitals is given by the State Board of Public Affairs, appointed by the Governor from more than one political party.

In 1938 there were 7,074 beds in the three State hospitals and 75 in private institutions. A psychiatric service in a veterans' general hospital reports 12 patients.

The average daily population for 1938 was 6,490 white and 682 colored patients in the State hospitals and 41 patients in the private institutions. During the year the State hospitals admitted 2,060 patients and the private institutions 378. On the last day of the year there were 7,293 patients present.

The three hospitals have clinical laboratories and X-ray equipment. Out-patient service is maintained in two of the hospitals.

In the State hospitals the ratio of assistant physicians to patients is 1:398.4, that of nursing personnel to patients is 1:12.3, and that of total employees to patients is 1:7.9.[1]

The State expended $1,553,244.27 for the maintenance of the hospitals at a per capita cost of $216.57.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

OREGON

The State Board of Control, consisting of three elected officials, manages the State hospitals.

In 1938 there were 3,980 beds in the two State mental hospitals. There is a veterans' facility with 566 beds. A psychiatric service in a veterans' general hospital reports one patient. A private hospital of 315 beds in Portland cares for the mentally ill of Alaska under Federal contract; another private institution has 10 beds.

The average daily population for 1938 was 3,918 in the State hospitals, 265 in the veterans' facility, and 312 in the private institutions. During the year the State hospitals admitted 1,236 patients, the veterans' facility 479, and the private institutions 144. On the last day of the year there were 4,454 patients present.

Both the State hospitals have clinical laboratories and X-ray equipment. Out-patient service has not been developed.

In the State hospitals the ratio of assistant physicians to patients is 1:301.4, that of nursing personnel to patients is 1:17.2, and that of total employees to patients is 1:10.4.[1]

The State expended $684,655.37 for the maintenance of the State hospitals at a per capita cost of $174.75.

PENNSYLVANIA

In the Department of Welfare there is a Bureau of Mental Health which supervises the mental hospitals. The State licenses and inspects the county and private institutions.

The seven civil State hospitals and the hospital for insane criminals have a total of 15,126 beds. There are 13 county hospitals with 11,818 beds, a veterans' facility with 1,461 beds, two endowed psychiatric hospitals with 374 beds, 13 private hospitals with 1,619 beds, and four psychiatric services in general hospitals, two of which report 520 beds. Psychiatric services are also maintained in a veterans' general hospital which reports four patients and a Naval general hospital which reports three patients.

The average daily population for 1938 was 15,211 in the State hospitals, including the hospital for insane criminals, 16,537 in the county institutions, 1,460 in the veterans' facility, and 1,864 in the private institutions. During the year the State hospitals admitted 2,673 patients, the county institutions 3,560, the veterans' facility 480, and the private institutions 2,243. On the last day of the year there were 35,233 patients present.

The State, Federal, and county institutions have clinical laboratories and X-ray equipment. Three State hospitals maintain schools of nursing. There is a considerable amount of out-patient service.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

In the State hospitals the ratio of assistant physicians to patients is 1:211.3, that of nursing personnel to patients is 1:9.5, and that of total employees to patients is 1:5.3.[1]

The State expended $4,777,905.59 for the maintenance of the State hospitals at a per capita cost of $313.82.

RHODE ISLAND

The mental hospital is under the control of the Department of Public Welfare.

The State hospital has 3,000 beds. An institution supported by a foundation has 174 beds. A psychiatric service in a general hospital has 60 beds. There is also a children's hospital with 50 beds which studies mental problems.

The average daily population for 1938 was 2,617 in the State hospital and 152 in the institution supported by a foundation. During the year the State hospital admitted 619 patients and the hospital carried on by the foundation 188. On the last day of the year there were 2,851 patients present.

The State hospital and the hospital carried on by the foundation have clinical laboratories and X-ray equipment. Each maintains a school of nursing.

In the State hospital the ratio of assistant physicians to patients is 1:218.1, that of nursing personnel to patients is 1:8.3, and that of total employees to patients is 1:5.8.

The State expended $724,449.87 for the maintenance of the State hospital at a per capita cost of $276.82.

SOUTH CAROLINA

The hospital is governed by a Board of Regents.

The State hospital has divisions six miles apart for whites and Negroes. There is one private institution in the State. The beds in the State hospital number 4,372 and in the private institution 35. A psychiatric service in a veterans' general hospital reports five patients.

The average daily population for 1938 was 4,171 patients in the State hospital and 21 in the private institution. During the year the State hospital admitted 1,619 patients and the private institution 264. On the last day of the year there were 4,393 patients present. The division for Negro patients cares not only for the mentally ill but also for the mentally defective.

The hospital has a clinical, pathological, and research laboratory and X-ray equipment. It maintains a school of nursing.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

In the State hospital the ratio of assistant physicians to patients is 1:260.7, that of nursing personnel to patients is 1:10.2, and that of total employees to patients is 1:5.9.

The State expended for the maintenance of the hospital $1,116,-367.82 at a per capita cost of $267.65.

SOUTH DAKOTA

The single State hospital is controlled by a State Board of Charities and Corrections.

In 1938 the State hospital had 1,783 beds. The average daily population was 1,623 patients and during the year 379 patients were admitted. On the last day of the year there were 1,621 patients present. A psychiatric service in a veterans' general hospital reports one patient.

The hospital has a clinical laboratory and X-ray equipment.

In the State hospital the ratio of assistant physicians to patients is 1:270.5, that of nursing personnel to patients is 1:12.8, and that of total employees to patients is 1:6.0.

In 1938 the State expended $425,432.09 for the maintenance of the State hospital at a per capita cost of $262.13.

TENNESSEE

The three State hospitals are governed by the Department of Institutions, which is headed by a commissioner. There is a unit at one of the State hospitals for the care of the insane criminals.

The State hospitals report 5,450 beds for mental disorders. There are two county hospitals with 968 beds. In two veterans' general hospitals a psychiatric service is maintained reporting 19 patients.

During 1938 the average daily population in the State hospitals was 5,213, in the county hospitals 908, and in the private institutions 77. During the year the State hospitals admitted 1,744 patients, the county hospitals 662 patients, and the private institutions 882. On the last day of the year there were 6,331 patients present.

The State hospitals report having clinical laboratories and X-ray equipment. No out-patient service is reported.

In the State hospitals the ratio of assistant physicians to patients is 1:473.9, that of nursing personnel to patients is 1:19.7, and that of total employees to patients is 1:8.7.

The State expended $933,276.46 for the maintenance of its hospitals at a per capita cost of $175.89.

TEXAS

The Board of Control exercises direction and control of the six State hospitals. One of these is for teaching and temporary care.

There is one veterans' facility. A psychiatric service in a veterans' general hospital reports one patient.

There were 12,479 beds in the six State hospitals, 947 in the veterans' hospital, and 242 in the private institutions. The average daily population for 1938 was 12,061 in the State hospitals, 96 in the psychopathic hospital, 847 in the veterans' hospital, and 170 in private institutions. During the year the State hospitals admitted 2,988 patients, the psychopathic hospital 446, the veterans' hospital 592, and the private institutions 1,023. On the last day of the year there were 13,483 patients present.

The State hospitals all have clinical laboratories and X-ray equipment.

In the State hospitals, other than the psychopathic hospital, the ratio of assistant physicians to patients is 1:317.4, that of nursing personnel to patients is 1:12.5, and that of total employees to patients is 1:6.7.[1]

The State expended $2,871,431.92 for the maintenance of its State hospitals at a per capita cost of $238.08, and $163,033.28 for the maintenance of the psychopathic hospital at a per capita cost of $1,698.26.

UTAH

The State hospital is governed by a board of nine trustees appointed by the Governor.

There were 1,074 beds in the hospital. The average daily population for 1938 was 1,123. During the year 339 patients were admitted and on the last day of the year there were 1,048 patients present. A psychiatric service in a veterans' general hospital reports one patient.

The hospital has a clinical laboratory and X-ray equipment. Outpatient work is carried on at three points.

In the State hospital the ratio of assistant physicians to patients is 1:374.3, that of nursing personnel to patients is 1:10.5, and that of total employees to patients is 1:7.2.[1]

The State expended $258,739.03 for the maintenance of the hospital at a per capita cost of $230.40.

VERMONT

The State hospital is under the jurisdiction of the Commissioner of Public Welfare. There is also an institution supported by a foundation and one private institution. The State boards several hundred patients in the institution carried on by the foundation.

There are 1,080 beds in the State hospital, 900 in the endowed hospital, and 20 in the private institution. The average daily population for 1938 was 1,054 patients in the State hospital, 756 in the

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

endowed hospital, and 9 in the private institution. During the year the State institution admitted 346 patients, the endowed institution 485, and the private institution 49. On the last day of the year there were 1,838 patients present.

The State and endowed institutions have clinical laboratories and X-ray equipment.

In the State hospital the ratio of assistant physicians to patients is 1:263.5, that of nursing personnel to patients is 1:8.9, and that of total employees to patients is 1:5.1.[1] In the endowed hospital the ratio of assistant physicians to patients is 1:126.0, and that of nursing personnel to patients is 1:6.2.

The State expended $300,032.42 for the maintenance of the State hospital at a per capita cost of $284.66, and $120,188.25 for the board of patients in the endowed hospital at a per capita cost of $304.27.

VIRGINIA

The State Hospital Board controls the institutions. There are four State hospitals and three private institutions.

There are 9,097 beds in the State hospitals and 231 in the private institutions. There is one veterans' facility with 678 beds. A psychiatric service in a veterans' general hospital reports 152 patients.

The average daily population for 1938 was 5,261 in the three hospitals for whites and 3,534 in the hospital for colored patients, 164 in the private institutions, and 672 in the veterans' hospital. During the year the State hospitals admitted 2,914 patients, the private institutions 1,125, and the veterans' hospital 443. On the last day of the year there were 9,691 patients present. The State hospital for Negro patients cares not only for the mentally ill, but also for mental defectives.

The State hospitals all have clinical laboratories and X-ray equipment.

In the State hospitals the ratio of assistant physicians to patients is 1:462.9, that of nursing personnel to patients is 1:16.5, and that of total employees to patients is 1:9.6.[1]

The State expended $1,365,969.01 for the maintenance of the hospitals at a per capita cost of $155.77.

WASHINGTON

The Central Board of Administration is responsible for the control of the three mental hospitals. There are three private institutions and one veterans' facility. A psychiatric service in a veterans' general hospital reports one patient.

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

There are 4,955 beds in the three State hospitals, 710 in the veterans' facility, and 81 in the private institution.

In 1938 the average daily population was 6,096 patients in the State hospitals, 639 in the veterans' facility, and 50 in private institutions. During the year the State hospitals admitted 1,558 patients, the veterans' facility 236, and the private institutions 150. On the last day of the year there were 6,853 patients present.

The State hospitals have clinical laboratories and X-ray equipment. The veterans' facility is similarly equipped. Schools of nursing are maintained in two hospitals. Out-patient work is done at the hospitals.

In the State hospitals the ratio of assistant physicians to patients is 1:234.5, that of nursing personnel to patients is 1:10.9, and that of total employees to patients is 1:7.5.[1]

The State expended $1,436,610.83 for the maintenance of the hospitals at a per capita cost of $234.66.

WEST VIRGINIA

The four State hospitals are under the control of the West Virginia Board of Control. They have 3,902 beds. A psychiatric service in a veterans' general hospital reports three patients.

The average daily population for 1938 was 3,093 in the three State hospitals for white patients and 375 in the hospital for colored patients. During the year the State hospitals admitted 1,374 patients and on the last day of the year there were 3,841 patients present.

Two of the hospitals maintain clinical laboratories and X-ray equipment.

In the State hospitals the ratio of assistant physicians to patients is 1:289.0, that of nursing personnel to patients is 1:16.3, and that of total employees to patients is 1:8.0.[1]

The State expended $793,499.63 for the maintenance of the hospitals at a per capita cost of $230.47.

WISCONSIN

The State Board of Control has control and direction of the three State hospitals and the power of inspection and supervision of the 38 county institutions. There is one veterans' facility. Eight private institutions are maintained, one of which is endowed. There is a psychiatric service in a university hospital. A psychiatric service in a veterans' general hospital reports 34 patients.

The average daily population for 1938 was 2,101 in the State hospitals, 290 in the veterans' facility, 10,045 in the county hospital and asylums, and 411 in the private institutions. During the year

[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

the State hospitals admitted 1,833 patients, the veterans' facility 83 patients, the county institutions 2,103 patients, and the private institutions 1,551 patients. On the last day of the year there were 12,962 patients present. The psychiatric service in the university hospital reported 1,000 admissions.

The State hospitals have clinical laboratories and X-ray equipment. One county hospital maintains a school of nursing. In the State hospitals the ratio of assistant physicians to patients is 1:175.1, that of nursing personnel to patients is 1:6.2, and that of total employees to patients is 1:3.6.[1]

The State expended $1,012,447.65 for the maintenance of its three hospitals at a per capita cost of $481.89.

WYOMING

The single State hospital is controlled by a board consisting of five elective officials.

In 1938 the State hospital had 610 beds and one veterans' facility had 598 beds. The average daily population was 557 patients in the State hospital and 579 in the veterans' facility. During the year there were 121 patients admitted. The veterans' facility admitted 230 patients. On the last day of the year there were 1,152 patients present. A psychiatric service in a veterans' general hospital reports two patients.

The hospital has a clinical laboratory and X-ray equipment.

In the State hospital the ratio of assistant physicians to patients is 1:557.0, that of nursing personnel to patients is 1:13.3, and that of total employees to patients is 1:8.3.[1]

The State expended $107,810.00 in 1938 for the maintenance of the State hospital at a per capita cost of $193.55.

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[1] In calculating this ratio, part-time workers are arbitrarily counted at half time.

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Index

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